

Microsoft

Exam Questions DP-300

Administering Relational Databases on Microsoft Azure (beta)



NEW QUESTION 1

- (Exam Topic 5)

You have an Azure subscription.

You plan to deploy a new Azure virtual machine that will host a Microsoft SQL Server instance.

You need to configure the disks on the virtual machine. The solution must meet the following requirements:

- Minimize latency for transaction logs.
- Minimize the impact on IO Of the virtual machine.

Which type of disk should you use for each workload? To answer, drag the appropriate disk types to the correct workloads. Each disk type may be used once, at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

NEW QUESTION 2

- (Exam Topic 5)

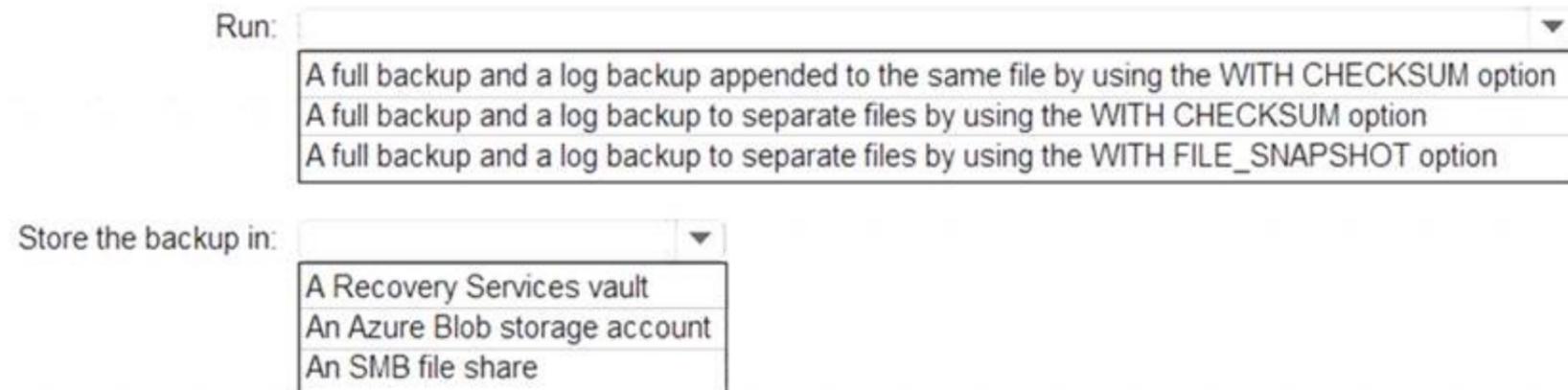
You have an on-premises Microsoft SQL Server 2019 instance that hosts a database named DB1.

You plan to perform an online migration of DB1 to an Azure SQL managed instance by using the Azure Database Migration Service.

You need to create a backup of DB1 that is accessible to the Azure Database Migration Service.

What should you run for the backup and where should you store the backup? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application, Word Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-managed-instance-online>

NEW QUESTION 3

- (Exam Topic 5)

You have two on-premises servers that run Windows Server 2019 and host a Microsoft SQL Server 2017 Always On availability group named AG1. AG1 contains a single database named DB1.

You have an Azure subscription. The subscription contains a virtual machine named VM1 that runs Linux.

You need to migrate DB1 to a SQL Server 2019 instance on VM1. The solution must minimize the downtime of DB1 during the migration.

What should you do? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

To prepare for the migration:

To perform the migration, use:

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Answer Area

To prepare for the migration:

To perform the migration, use:

NEW QUESTION 4

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have SQL Server 2019 on an Azure virtual machine.

You are troubleshooting performance issues for a query in a SQL Server instance.

To gather more information, you query `sys.dm_exec_requests` and discover that the wait type is `PAGELATCH_UP` and the wait resource is `2:3:905856`.

You need to improve system performance.

Solution: You reduce the use of table variables and temporary tables. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Reference:

<https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention>

NEW QUESTION 5

- (Exam Topic 5)

You have an Azure Data Factory that contains 10 pipelines.

You need to label each pipeline with its main purpose of either ingest, transform, or load. The labels must be available for grouping and filtering when using the monitoring experience in Data Factory.

What should you add to each pipeline?

- A. an annotation
- B. a resource tag
- C. a run group ID
- D. a user property
- E. a correlation ID

Answer: A

Explanation:

Azure Data Factory annotations help you easily filter different Azure Data Factory objects based on a tag. You can define tags so you can see their performance or find errors faster.

Reference:

<https://www.techtalkcorner.com/monitor-azure-data-factory-annotations/>

NEW QUESTION 6

- (Exam Topic 5)

You have an Azure subscription that contains an instance of SQL Server on Azure Virtual Machines. The virtual machine hosts a database named DB1. You need to monitor DB1 by using Extended Events. The solution must meet the following requirements:

- Capture raw event data and store the data in Azure Storage.
- Minimize the performance impact of capturing extended events.

How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
CREATE EVENT SESSION session1 ON DATABASE
ADD EVENT sqlserver.sql_statement_starting
(
ACTION (sqlserver.sql_text)
WHERE statement LIKE 'UPDATE gmTabEmployee%'
)
ADD TARGET
package0.
event_file
event_file
event_stream
ring_buffer
)
SET filename = 'https://gmstorageaccountxevent.blob.core.windows.net/gmcontainerxevent/anyfilenamexel242b.xel'
)
WITH
(MAX_MEMORY = 10 MB,
EVENT_RETENTION_MODE=
ALLOW_MULTIPLE_EVENT_LOSS
ALLOW_MULTIPLE_EVENT_LOSS
ALLOW_SINGLE_EVENT_LOSS
NO_EVENT_LOSS
MAX_DISPATCH_LATENCY = 3 SECONDS)
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Answer Area

```
CREATE EVENT SESSION session1 ON DATABASE
ADD EVENT sqlserver.sql_statement_starting
(
ACTION (sqlserver.sql_text)
WHERE statement LIKE 'UPDATE gmTabEmployee%'
)
ADD TARGET
package0.
event_file
event_file
event_stream
ring_buffer
)
SET filename = 'https://gmstorageaccountxevent.blob.core.windows.net/gmcontainerxevent/anyfilenamexel242b.xel'
)
WITH
(MAX_MEMORY = 10 MB,
EVENT_RETENTION_MODE=
ALLOW_MULTIPLE_EVENT_LOSS
ALLOW_MULTIPLE_EVENT_LOSS
ALLOW_SINGLE_EVENT_LOSS
NO_EVENT_LOSS
MAX_DISPATCH_LATENCY = 3 SECONDS)
```

NEW QUESTION 7

- (Exam Topic 5)

You have an instance of SQL Server on Azure Virtual Machines named SQL1. SQL1 contains a database named DB1.

You need to enable Transparent Data Encryption (TDE) for DB1.

Which three objects should you create in sequence? To answer, move the appropriate objects from the list of objects to the answer area and arrange them in the

correct order.

| Objects | Answer Area |
|--------------------------------------------------|-------------|
| a database encryption key in the master database | |
| a master key in DB1 | |
| a certificate in DB1 | |
| a master key in the master database | |
| a certificate in the master database | |
| a database encryption key in DB1 | |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

| Objects | Answer Area |
|--------------------------------------------------|--------------------------------------|
| a database encryption key in the master database | a master key in the master database |
| a master key in DB1 | a certificate in the master database |
| a certificate in DB1 | a database encryption key in DB1 |
| a master key in the master database | |
| a certificate in the master database | |
| a database encryption key in DB1 | |

NEW QUESTION 8

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- > During normal operations, provide at least two readable copies of Sales.
- > Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the General Purpose service tier and geo-replication. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead deploy an Azure SQL database that uses the Business Critical service tier and Availability Zones. Note: Premium and Business Critical service tiers leverage the Premium availability model, which integrates compute resources (sqlservr.exe process) and storage (locally attached SSD) on a single node. High availability is achieved by replicating both compute and storage to additional nodes creating a three to four-node cluster.

By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW).

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

NEW QUESTION 9

- (Exam Topic 5)

You have an Azure SQL database named db1 on a server named server1.

The Intelligent Insights diagnostics log identifies that several tables are missing indexes. You need to ensure that indexes are created for the tables.

What should you do?

- A. Run the DBCC SQLPERF command.
- B. Run the dbcc dbreindexcommand.
- C. Modify the automatic tuning settings for db1.
- D. Modify the Query Store settings for db1.

Answer: C

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/automatic-tuning-overview>

NEW QUESTION 10

- (Exam Topic 5)

You have an on-premises multi-tier application named App1 that includes a web tier, an application tier, and a Microsoft SQL Server tier. All the tiers run on Hyper-V virtual machines.

Your new disaster recovery plan requires that all business-critical applications can be recovered to Azure. You need to recommend a solution to fail over the database tier of App1 to Azure. The solution must provide the ability to test failover to Azure without affecting the current environment. What should you include in the recommendation?

- A. Azure Backup
- B. Azure Information Protection
- C. Windows Server Failover Cluster
- D. Azure Site Recovery

Answer: D

Explanation:

Reference:
<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-test-failover-to-azure>

NEW QUESTION 10

- (Exam Topic 5)

You have an Azure SQL Database server named sqlsrv1 that hosts 10 Azure SQL databases. The databases perform slower than expected. You need to identify whether the performance issue relates to the use of tempdb on sqlsrv1. What should you do?

- A. Run Query Store-based queries
- B. Review information provided by SQL Server Profiler-based traces
- C. Review information provided by Query Performance Insight
- D. Run dynamic management view-based queries

Answer: D

Explanation:

The diagnostics log outputs tempDB contention details. You can use the information as the starting point for troubleshooting. You can use the Intelligent Insights performance diagnostics log of Azure SQL Database to troubleshoot performance issues.

Reference:
<https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-troubleshoot-performance#tempdb> <https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-use-diagnostics-log>

NEW QUESTION 14

- (Exam Topic 5)

You have an Azure Data Lake Storage Gen2 container.

Data is ingested into the container, and then transformed by a data integration application. The data is NOT modified after that. Users can read files in the container but cannot modify the files.

You need to design a data archiving solution that meets the following requirements:

- > New data is accessed frequently and must be available as quickly as possible.
- > Data that is older than five years is accessed infrequently but must be available within one second when requested.
- > Data that is older than seven years is NOT accessed. After seven years, the data must be persisted at the lowest cost possible.
- > Costs must be minimized while maintaining the required availability.

How should you manage the data? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Five-year-old data:

| | |
|--------------------------|---|
| | ▼ |
| Delete the blob. | |
| Move to archive storage. | |
| Move to cool storage. | |
| Move to hot storage. | |

Seven-year-old data:

| | |
|--------------------------|---|
| | ▼ |
| Delete the blob. | |
| Move to archive storage. | |
| Move to cool storage. | |
| Move to hot storage. | |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text, table Description automatically generated

Box 1: Move to cool storage

The cool access tier has lower storage costs and higher access costs compared to hot storage. This tier is intended for data that will remain in the cool tier for at least 30 days. Example usage scenarios for the cool access tier include:

Short-term backup and disaster recovery

Older data not used frequently but expected to be available immediately when accessed

Large data sets that need to be stored cost effectively, while more data is being gathered for future processing Note: Hot - Optimized for storing data that is accessed frequently.

Cool - Optimized for storing data that is infrequently accessed and stored for at least 30 days.

Archive - Optimized for storing data that is rarely accessed and stored for at least 180 days with flexible latency requirements, on the order of hours.

Box 2: Move to archive storage

Example usage scenarios for the archive access tier include: Long-term backup, secondary backup, and archival datasets

Original (raw) data that must be preserved, even after it has been processed into final usable form Compliance and archival data that needs to be stored for a long time and is hardly ever accessed Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers>

NEW QUESTION 16

- (Exam Topic 5)

You have an Azure SQL database named DB1 that contains a table named Orders. The Orders table contains a row for each sales order. Each sales order includes the name of the user who placed the order.

You need to implement row-level security (RLS). The solution must ensure that the users can view only their respective sales orders.

What should you include in the solution? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Create:

- A materialized view in DB1
- A security policy in the Orders table
- Database scoped credentials in DB1

Control access to the rows by using:

- A masking rule
- A table-valued function
- The CONTAINS predicate

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Create:

- A materialized view in DB1
- A security policy in the Orders table
- Database scoped credentials in DB1

Control access to the rows by using:

- A masking rule
- A table-valued function
- The CONTAINS predicate

NEW QUESTION 21

- (Exam Topic 5)

You have an on-premises datacenter that contains a 14-TB Microsoft SQL Server database.

You plan to create an Azure SQL managed instance and migrate the on-premises database to the new instance. Which three service tiers support the SQL managed instance? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. General Purpose Standard
- B. Business Critical Premium
- C. Business Critical Memory Optimized Premium
- D. General Purpose Premium
- E. Business Critical Standard

Answer: BCD

NEW QUESTION 25

- (Exam Topic 5)

You have an Azure Databricks resource.

You need to log actions that relate to changes in compute for the Databricks resource. Which Databricks services should you log?

- A. clusters
- B. jobs
- C. DBFS

- D. SSH
- E. workspace

Answer: E

Explanation:

Cloud Provider Infrastructure Logs.

Databricks logging allows security and admin teams to demonstrate conformance to data governance standards within or from a Databricks workspace.

Customers, especially in the regulated industries, also need records on activities like:

- User access control to cloud data storage
- Cloud Identity and Access Management roles
- User access to cloud network and compute

Azure Databricks offers three distinct workloads on several VM Instances tailored for your data analytics workflow—the Jobs Compute and Jobs Light Compute workloads make it easy for data engineers to build and execute jobs, and the All-Purpose Compute workload makes it easy for data scientists to explore, visualize, manipulate, and share data and insights interactively.

Reference:

<https://databricks.com/blog/2020/03/25/trust-but-verify-with-databricks.html>

NEW QUESTION 27

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You have a table name Table1 that has 20 columns of type CHAR(400). Row compression for Table1 is enabled.

During a database audit, you discover that none of the fields contain more than 150 characters. You need to ensure that you can apply page compression to Table1.

What should you do?

- A. Configure the columns as sparse.
- B. Change the column type to nvarchar(MAX).
- C. Change the column type to varchar(MAX).
- D. Change the column type to varchar(200).

Answer: D

Explanation:

Reference:

<https://www.sqlshack.com/sql-varchar-data-type-deep-dive/> <https://36chambers.wordpress.com/2020/06/18/nvarchar-everywhere-a-thought-experiment/>

NEW QUESTION 31

- (Exam Topic 5)

You have the following Transact-SQL query.

```
SELECT
    [file_id] AS [File ID],
    [type] AS [File Type],
    substring([physical_name], 1,1) AS [Drive],
    [name] AS [Logical Name],
    [physical_name] AS [Physical Name],
    CAST([size] as DECIMAL(38,0))/128.0 AS [ColumnA],
    CAST(FILEPROPERTY([name], 'SpaceUsed') AS DECIMAL(38,0))/128.0 AS
[ColumnB],
    (CAST([size] AS DECIMAL(38,0))/128.0) - (CAST(FILEPROPERTY([name],
'SpaceUsed') AS DECIMAL(38,0))/128.0) AS [ColumnC],
    [max_size] AS [ColumnD],
    [is_percent_growth] AS [Percent Growth Enabled],
    [growth] AS [Growth Rate],
    SYSDATETIME() AS [Current Date]
FROM sys.database_files;
```

Which column returned by the query represents the free space in each file?

- A. ColumnA
- B. ColumnB
- C. ColumnC
- D. ColumnD

Answer: C

Explanation:

Example:

Free space for the file in the below query result set will be returned by the FreeSpaceMB column. `SELECT DB_NAME() AS DbName, name AS FileName, type_desc, size/128.0 AS CurrentSizeMB, size/128.0 - CAST(FILEPROPERTY(name, 'SpaceUsed') AS INT)/128.0 AS FreeSpaceMB FROM sys.database_files WHERE type IN (0,1);`

Reference:
<https://www.sqlshack.com/how-to-determine-free-space-and-file-size-for-sql-server-databases/>

NEW QUESTION 36

- (Exam Topic 5)

You have a new Azure SQL database named DB1 on an Azure SQL server named AzSQL1. The only user who was created is the server administrator.

You need to create a contained database user in DB1 who will use Azure Active Directory (Azure AD) for authentication.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|------------------------------------------------------------------------|-------------|
| Connect to DB1 by using the Active Directory admin account. | |
| Create a user by using the FROM EXTERNAL PROVIDER clause. | |
| Connect to DB1 by using the server administrator account. | ⤴ |
| Set the Active Directory Admin for AzSQL1. | ⤵ |
| From the Azure portal, assign the SQL DB Contributor role to the user. | ⤴ |
| Create a login in the master database. | ⤵ |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Set up the Active Directory Admin for AzSQL1. Step 2: Connect to DB1 by using the server administrator.

Sign into your managed instance with an Azure AD login granted with the sysadmin role. Step 3: Create a user by using the FROM EXTERNAL PROVIDER clause.

FROM EXTERNAL PROVIDER is available for creating server-level Azure AD logins in SQL Database managed instance. Azure AD logins allow database-level Azure AD principals to be mapped to server-level Azure AD logins. To create an Azure AD user from an Azure AD login use the following syntax:

CREATE USER [AAD_principal] FROM LOGIN [Azure AD login] Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/create-user-transact-sql>

NEW QUESTION 40

- (Exam Topic 5)

You have an Azure subscription that contains an Azure SQL managed instance named SQLMi1 and a SQL Agent job named Backupdb. Backupdb performs a daily backup of the databases hosted on SQLMi1.

You need to be notified by email if the job fails.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

NOTE:More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

| Actions | Answer Area |
|----------------------------------------|-------------|
| Create a SQL Server Agent alert. | |
| Create an operator. | |
| Create an extended event. | ⤴ |
| Enable Database Mail. | ⤵ |
| Add a failure notification to the job. | ⤴ |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/job-automation-managed-instance>

NEW QUESTION 43

- (Exam Topic 5)

You have an Azure SQL database.

Users report that the executions of a stored procedure are slower than usual. You suspect that a regressed query is causing the performance issue.

You need to view the query execution plan to verify whether a regressed query is causing the issue. The solution must minimize effort.

What should you use?

- A. Performance Recommendations in the Azure portal
- B. Extended Events in Microsoft SQL Server Management Studio (SSMS)
- C. Query Store in Microsoft SQL Server Management Studio (SSMS)
- D. Query Performance Insight in the Azure portal

Answer: C

Explanation:

Use the Query Store Page in SQL Server Management Studio.

Query performance regressions caused by execution plan changes can be non-trivial and time consuming to resolve.

Since the Query Store retains multiple execution plans per query, it can enforce policies to direct the Query Processor to use a specific execution plan for a query.

This is referred to as plan forcing. Plan forcing in Query Store is provided by using a mechanism similar to the USE PLAN query hint, but it does not require any change in user applications. Plan forcing can resolve a query performance regression caused by a plan change in a very short period of time.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu>

NEW QUESTION 46

- (Exam Topic 5)

You have An Azure SQL managed instance.

You need to configure the SQL Server Agent service to email job notifications. Which statement should you execute?

A)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'sysadmin_dbmail_profile';
```

B)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'application_dbmail_profile';
```

C)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'AzureManagedInstance_dbmail_profile';
```

D)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'sys_dbmail_profile';
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 47

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

| Name | Type |
|------|-------------------------------------------|
| App1 | Azure web app |
| db1 | Azure SQL database in the serverless tier |

App1 experiences transient connection errors and timeouts when it attempts to access db1 after extended periods of inactivity. You need to modify db1 to resolve the issues experienced by App1 as soon as possible, without considering immediate costs. What should you do?

- A. Increase the number Of vCores allocated to db1.
- B. Disable auto-pause delay for db1.
- C. Decrease the auto-pause delay for db1.
- D. Enable automatic tuning for db1.

Answer: D

NEW QUESTION 52

- (Exam Topic 5)

You have a resource group named App1Dev that contains an Azure SQL Database server named DevServer1. DevServer1 contains an Azure SQL database named DB1. The schema and permissions for DB1 are saved in a Microsoft SQL Server Data Tools (SSDT) database project.

You need to populate a new resource group named App1Test with the DB1 database and an Azure SQL Server named TestServer1. The resources in App1Test must have the same configurations as the resources in App1Dev.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|-----------------------------------------------------------------------|-------------|
| Change the Active Directory Admin on TestServer1 | |
| Change the server name and related variables in the templates | |
| From the database project, deploy the database schema and permissions | ⤴ |
| Add IP addresses to the firewall | ⤵ |
| From the Azure portal, export the Azure Resource Manager templates | ⤴ |
| From the Azure portal, deploy the templates. | ⤵ |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

| Actions | Answer Area |
|-----------------------------------------------------------------------|-------------|
| Change the Active Directory Admin on TestServer1 | |
| Change the server name and related variables in the templates | |
| From the database project, deploy the database schema and permissions | ⤴ |
| Add IP addresses to the firewall | ⤵ |
| From the Azure portal, export the Azure Resource Manager templates | ⤴ |
| From the Azure portal, deploy the templates. | ⤵ |

NEW QUESTION 54

- (Exam Topic 5)

You have 10 Azure virtual machines that have SQL Server installed.

You need to implement a backup strategy to ensure that you can restore specific databases to other SQL Server instances. The solution must provide centralized management of the backups.

What should you include in the backup strategy?

- A. Automated Backup in the SQL virtual machine settings
- B. Azure Backup
- C. Azure Site Recovery
- D. SQL Server Agent jobs

Answer: B

Explanation:

Azure Backup provides an Enterprise class backup capability for SQL Server on Azure VMs. All backups are stored and managed in a Recovery Services vault. There are several advantages that this solution provides, especially for Enterprises.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/backup-restore#azbackup>

NEW QUESTION 57

- (Exam Topic 5)

You have the following Azure Data Factory pipelines:

- Ingest Data from System1
- Ingest Data from System2
- Populate Dimensions

> Populate Facts

Ingest Data from System1 and Ingest Data from System2 have no dependencies. Populate Dimensions must execute after Ingest Data from System1 and Ingest Data from System2. Populate Facts must execute after the Populate Dimensions pipeline. All the pipelines must execute every eight hours. What should you do to schedule the pipelines for execution?

- A. Add a schedule trigger to all four pipelines.
- B. Add an event trigger to all four pipelines.
- C. Create a parent pipeline that contains the four pipelines and use an event trigger.
- D. Create a parent pipeline that contains the four pipelines and use a schedule trigger.

Answer: D

Explanation:

Reference:

<https://www.mssqltips.com/sqlservertip/6137/azure-data-factory-control-flow-activities-overview/>

NEW QUESTION 61

- (Exam Topic 5)

You have an Azure subscription that contains an Azure SQL database named SQLDb1. SQLDb1 contains a table named Table1.

You plan to deploy an Azure web app named webapp1 that will export rows in Table1 that have changed. You need to ensure that webapp1 can identify the changes to Table1. The solution must meet the following requirements:

- Minimize compute times.
- Minimize storage.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

From webapp1, connect to SQLDb1, obtain the initial dataset, and run the CHANGETABLE() function.

Connect to SQLDb1 and run the following Transact-SQL statement.

```
ALTER DATABASE SQLDB1 SET CHANGE_TRACKING = ON
```

From webapp1, connect to SQLDb1, obtain the initial dataset, and run the CHANGE_TRACKING_CURRENT_VERSION() function.

Connect to SQLDb1 and run the following Transact-SQL statement.

```
EXEC sys.sp_cdc_enable_table
```

Connect to SQLDb1 and run the following Transact-SQL statement.

```
EXEC sys.sp_cdc_enable_db
```

Connect to SQLDb1 and run the following Transact-SQL statement.

```
ALTER TABLE dbo.Table1 ENABLE CHANGE_TRACKING
```

Answer Area



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

NEW QUESTION 64

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You need to ensure that DB1 will support automatic failover without data loss if a datacenter fails. The solution must minimize costs.

Which deployment option and pricing tier should you configure?

- A. Azure SQL Database Hyperscale
- B. Azure SQL Database managed instance General Purpose
- C. Azure SQL Database Premium
- D. Azure SQL Database Basic

Answer: C

Explanation:

By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone redundant configuration in the Premium or Business Critical service tiers does not create additional database redundancy, you can enable it at no extra cost. By selecting a zone redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic. You can also convert any existing Premium or Business Critical databases or pools to the zone redundant configuration.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

NEW QUESTION 67

- (Exam Topic 5)

You have two on-premises Microsoft SQL Server 2019 instances named SQL1 and SQL2.

You need to migrate the databases hosted on SQL 1 to Azure. The solution must meet the following requirements:

The service that hosts the migrated databases must be able to communicate with SQL2 by using linked server connections.

Administrative effort must be minimized. What should you use to host the databases?

- A. a single Azure SQL database
- B. an Azure SQL Database elastic pool
- C. SQL Server on Azure Virtual Machines
- D. Azure SQL Managed Instance

Answer: D

NEW QUESTION 68

- (Exam Topic 5)

You have an Azure Synapse Analytics dedicated SQL pool.

You run `PDW_SHOWSPACEUSED('dbo.FactInternetSales');` and get the results shown in the following table.

| ROWS | RESERVED_SPACE | DATA_SPACE | INDEX_SPACE | UNUSED_SPACE | PDW_NODE_ID | DISTRIBUTION_ID |
|------|----------------|------------|-------------|--------------|-------------|-----------------|
| 694 | 2776 | 616 | 48 | 2112 | 1 | 1 |
| 407 | 2704 | 576 | 48 | 2080 | 1 | 2 |
| 53 | 2376 | 512 | 16 | 1848 | 1 | 3 |
| 58 | 2376 | 512 | 16 | 1848 | 1 | 4 |
| 168 | 2632 | 528 | 32 | 2072 | 1 | 5 |
| 195 | 2696 | 536 | 32 | 2128 | 1 | 6 |
| 5995 | 3464 | 1424 | 32 | 2008 | 1 | 7 |
| 0 | 2232 | 496 | 0 | 1736 | 1 | 8 |
| 264 | 2576 | 544 | 40 | 1992 | 1 | 9 |
| 3008 | 3016 | 960 | 32 | 2024 | 1 | 10 |
| ... | ... | ... | ... | ... | ... | ... |
| 1550 | 2832 | 752 | 48 | 2032 | 1 | 50 |
| 1238 | 2832 | 696 | 40 | 2096 | 1 | 51 |
| 192 | 2632 | 528 | 32 | 2072 | 1 | 52 |
| 1127 | 2768 | 680 | 48 | 2040 | 1 | 53 |
| 1244 | 3032 | 704 | 64 | 2264 | 1 | 54 |
| 409 | 2632 | 568 | 32 | 2032 | 1 | 55 |
| 0 | 2232 | 496 | 0 | 1736 | 1 | 56 |
| 1437 | 2832 | 728 | 40 | 2064 | 1 | 57 |
| 0 | 2232 | 496 | 0 | 1736 | 1 | 58 |
| 384 | 2632 | 560 | 32 | 2040 | 1 | 59 |
| 225 | 2768 | 544 | 40 | 2184 | 1 | 60 |

Which statement accurately describes the `dbo.FactInternetSales` table?

- A. The table contains less than 10,000 rows.
- B. All distributions contain data.
- C. The table uses round-robin distribution
- D. The table is skewed.

Answer: D

Explanation:

The rows per distribution can vary up to 10% without a noticeable impact on performance. Here the distribution varies more than 10%. It is skewed.

Note: `SHOWSPACEUSED` displays the number of rows, disk space reserved, and disk space used for a specific table, or for all tables in a Azure Synapse Analytics or Parallel Data Warehouse database.

This is a very quick and simple way to see the number of table rows that are stored in each of the 60 distributions of your database. Remember that for the most balanced performance, the rows in your distributed table should be spread evenly across all the distributions.

`ROUND_ROBIN` distributed tables should not be skewed. Data is distributed evenly across the nodes by design.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribu> <https://github.com/rgl/azure-content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib>

NEW QUESTION 72

- (Exam Topic 5)

You are building a database backup solution for a SQL Server database hosted on an Azure virtual machine. In the event of an Azure regional outage, you need to be able to restore the database backups. The solution must minimize costs.

Which type of storage accounts should you use for the backups?

- A. locally-redundant storage (LRS)
- B. read-access geo-redundant storage (RA-GRS)
- C. zone-redundant storage (ZRS)
- D. geo-redundant storage

Answer: B

Explanation:

Geo-redundant storage (with GRS or GZRS) replicates your data to another physical location in the secondary region to protect against regional outages. However, that data is available to be read only if the customer or Microsoft initiates a failover from the primary to secondary region. When you enable read access to the secondary region, your data is available to be read if the primary region becomes unavailable. For read access to the secondary region, enable read-access geo-redundant storage (RA-GRS) or read-access geo-zone-redundant storage (RA-GZRS).

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy>

NEW QUESTION 77

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 contains a table named CustomerPII.

You need to record whenever users query the CustomerPII table.

Which two options should you enable? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. server audit specification
- B. SQL Server audit
- C. database audit specification
- D. a server principal

Answer: AC

Explanation:

An auditing policy can be defined for a specific database or as a default server policy in Azure (which hosts SQL Database or Azure Synapse):

- A server policy applies to all existing and newly created databases on the server.
- If server auditing is enabled, it always applies to the database. The database will be audited, regardless of the database auditing settings.
- Enabling auditing on the database, in addition to enabling it on the server, does not override or change any of the settings of the server auditing. Both audits will exist side by side.

Note:

The Server Audit Specification object belongs to an audit.

A Database Audit Specification defines which Audit Action Groups will be audited for the specific database in which the specification is created.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auditing-overview>

NEW QUESTION 82

- (Exam Topic 5)

You have 20 Azure SQL databases provisioned by using the vCore purchasing model. You plan to create an Azure SQL Database elastic pool and add the 20 databases.

Which three metrics should you use to size the elastic pool to meet the demands of your workload? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. total size of all the databases
- B. geo-replication support
- C. number of concurrently peaking databases * peak CPU utilization per database
- D. maximum number of concurrent sessions for all the databases
- E. total number of databases * average CPU utilization per database

Answer: ACE

Explanation:

CE: Estimate the vCores needed for the pool as follows:

For vCore-based purchasing model: $\text{MAX}(\langle \text{Total number of DBs} \times \text{average vCore utilization per DB} \rangle, \langle \text{Number of concurrently peaking DBs} \times \text{Peak vCore utilization per DB} \rangle)$

A: Estimate the storage space needed for the pool by adding the number of bytes needed for all the databases in the pool.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview>

NEW QUESTION 84

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. You have an application that queries DB1 to generate a sales report.

You need to see the parameter values from the last time the query was executed.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. EnableLast_Query_Plan_Statsin the master database
- B. EnableLightweight_Query_Profilingin DB1
- C. EnableLast_Query_Plan_Statsin DB1
- D. EnableLightweight_Query_Profilingin the master database
- E. EnablePARAMETER_SNIFFINGin DB1

Answer: AC

Explanation:

Last_Query_Plan_Stats allows you to enable or disable collection of the last query plan statistics (equivalent to an actual execution plan) in sys.dm_exec_query_plan_stats.

Lightweight profiling can be disabled at the database level using the LIGHTWEIGHT_QUERY_PROFILING database scoped configuration: ALTER DATABASE SCOPED CONFIGURATION SET LIGHTWEIGHT_QUERY_PROFILING = OFF;.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/query-profiling-infrastructure>

NEW QUESTION 85

- (Exam Topic 5)

You have a Microsoft SQL Server 2019 database named DB1 and an Azure SQL managed instance named SQLMI1. You need to move a SQL Server Agent job from DB1 to SQLMI1. Which job attribute is unsupported in SQLMI1?

- A. log to table
- B. email notifications
- C. schedules
- D. output files

Answer: D

NEW QUESTION 90

- (Exam Topic 5)

You have an Azure subscription.

You plan to migrate 10 on-premises Microsoft SQL Server instances to Azure.

You need to ensure that the migrated environment can be managed by using multiserver administration and supports master/target (MSX/TSX) jobs. The solution must minimize administrative effort.

Which SQL deployment options should you select as the master server (MSX) and the target server (TSX)? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

MSX: ▼

- SQL database
- SQL managed instances
- SQL virtual machines

TSX: ▼

- SQL database
- SQL managed instances
- SQL virtual machines

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

MSX: ▼

- SQL database
- SQL managed instances
- SQL virtual machines

TSX: ▼

- SQL database
- SQL managed instances
- SQL virtual machines

NEW QUESTION 93

- (Exam Topic 5)

You have an Azure SQL database that contains a table named factSales. FactSales contains the columns shown in the following table.

| Name | Data type |
|--------------|--------------|
| SalesID | Int |
| Product | Int |
| Total Number | Numeric(8,4) |
| Tax Number | Numeric(8,4) |
| SalesRep | Varchar(30) |

FactSales has 6 billion rows and is loaded nightly by using a batch process. Which type of compression provides the greatest space reduction for the database?

- A. page compression
- B. row compression
- C. columnstore compression
- D. columnstore archival compression

Answer: D

Explanation:

Columnstore tables and indexes are always stored with columnstore compression. You can further reduce the size of columnstore data by configuring an additional compression called archival compression.

Note: Columnstore — The columnstore index is also logically organized as a table with rows and columns, but the data is physically stored in a column-wise data format.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/data-compression/data-compression>

NEW QUESTION 97

- (Exam Topic 5)

You have an Azure subscription.

You need to deploy two instances of SQL Server on Azure virtual machines in a highly available configuration that will use an Always On availability group. The solution must meet the following requirements:

- Minimize how long it takes to fail over.
- Maintain existing connections to the primary replica during a failover. What should you do?

- A. Connect each virtual machine to a single subnet on a single virtual network.
- B. Connect each virtual machine to a single subnet on a virtual network
- C. Deploy a standard Azure load balancer.
- D. Connect each virtual machine to a different subnet on a single virtual network.
- E. Connect each virtual machine to a different subnet on a virtual network
- F. Deploy a basic Azure load balancer.

Answer: C

NEW QUESTION 100

- (Exam Topic 5)

You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.

You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.

You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:

- > Ensure that all traffic to the public endpoint of SqlSrv1 is blocked.
- > Minimize the possibility of VM1 exfiltrating data stored in SqlDb1. What should you create on VNet1?

- A. a VPN gateway
- B. a service endpoint
- C. a private link
- D. an ExpressRoute gateway

Answer: C

Explanation:

Azure Private Link enables you to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a private endpoint in your virtual network.

Traffic between your virtual network and the service travels the Microsoft backbone network. Exposing your service to the public internet is no longer necessary.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-link-overview>

NEW QUESTION 101

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

| Name | Type | Azure region |
|------|----------------------------|--------------|
| VM1 | Azure virtual machine | West US 2 |
| MI1 | Azure SQL Managed Instance | East US |

You need to configure a connection between VM1 and MIL. The solution must meet the following requirements:

- The connection must be encrypted.
- Network latency must be minimized. What should you implement?

- A. virtual network peering
- B. private endpoints
- C. service endpoints
- D. a site-to-site VPN

Answer: B

NEW QUESTION 106

- (Exam Topic 5)

You have an on-premises Microsoft SQL server that uses the FileTables and FileStream features. You plan to migrate to Azure SQL. Which service should you use?

- A. Azure SQL Database
- B. SQL Server on an Azure Virtual Machine
- C. Azure SQL Managed Instance
- D. Azure Database for MySQL

Answer: B

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/migration-guides/database/sql-server-to-sql-database-overview>

NEW QUESTION 107

- (Exam Topic 5)

You have an Azure SQL managed instance named MI1.

You need to implement automatic tuning for the databases of MI1. What should you do?

- A. Use the REST API to call the patch operation and modify the AutomaticTuningServerMode property.
- B. Use Transact-SQL to enable the force_last_good_plan option.
- C. From the Azure portal, configure automatic tuning.

Answer: B

NEW QUESTION 108

- (Exam Topic 5)

You have an Azure SQL Database elastic pool that contains 10 databases. You receive the following alert.

Msg 1132, Level 16, State 1, Line 1

The elastic pool has reached its storage limit. The storage used for the elastic pool cannot exceed (76800) MBs.

You need to resolve the alert. The solution must minimize administrative effort.

Which three actions can you perform? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. Delete data from a database.
- B. Remove a database from the pool.
- C. Increase the maximum storage of the elastic pool.
- D. Shrink individual databases.
- E. Enable data compression.

Answer: BCD

NEW QUESTION 110

- (Exam Topic 5)

You are designing an enterprise data warehouse in Azure Synapse Analytics that will contain a table named Customers. Customers will contain credit card information.

You need to recommend a solution to provide salespeople with the ability to view all the entries in Customers. The solution must prevent all the salespeople from viewing or inferring the credit card information.

What should you include in the recommendation?

- A. row-level security
- B. data masking
- C. Always Encrypted
- D. column-level security

Answer: B

Explanation:

Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics support dynamic data masking. Dynamic data masking limits sensitive data exposure by masking it to non-privileged users.

The Credit card masking method exposes the last four digits of the designated fields and adds a constant string as a prefix in the form of a credit card.

Example:

XXXX-XXXX-XXXX-1234

NEW QUESTION 113

- (Exam Topic 5)

You have SQL Server 2019 or an Azure virtual machine that runs Windows Server 2019. The virtual machine has 4 vCPUs and 28 GB of memory. You scale up the virtual machine to 8 vCPUs and 64 GB of memory. You need to reduce tempdb contention without negatively affecting server performance. What is the number of secondary data files that you should configure for tempdb?

- A. 2
- B. 4
- C. 8
- D. 64

Answer: C

NEW QUESTION 118

- (Exam Topic 5)

You configure backups for an Azure SQL database as shown in the following exhibit.

Point-in-time-restore
 Specify how long you want to keep your point-in-time backups. [Learn more](#)

How many days would you like PITR backups to be kept? ⓘ

-----○----- **14**

Long-term retention
 Specify how long you want to keep your long-term retention backups. You may choose to keep yearly backups for up to 10 years. [Learn more](#)

Weekly LTR Backups
 Keep weekly backups for:

Monthly LTR Backups
 Keep the first backup of each month for:

Yearly LTR Backups
 Keep an annual backup for:

Which weekly backup of the year would you like to keep?

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic. NOTE: Each correct selection is worth one point.

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a **[answer choice]**

After the 52nd weekly backup runs, there will be **[answer choice]** in long term retention.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a [answer choice]

- point-time restore (PITR) backup.
- yearly long-term retention (LTR) backup.
- weekly long-term retention (LTR) backup.
- monthly long-term retention (LTR) backup.

After the 52nd weekly backup runs, there will be [answer choice] in long term retention.

- 1 backup copy
- 52 backup copies
- 64 backup copies
- 65 backup copies

NEW QUESTION 122

- (Exam Topic 5)

You have an Azure SQL database. The database contains a table that uses a columnstore index and is accessed infrequently.

You enable columnstore archival compression.

What are two possible results of the configuration? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Queries that use the index will consume more disk I/O.
- B. Queries that use the index will retrieve fewer data pages.
- C. The index will consume more disk space.
- D. The index will consume more memory.
- E. Queries that use the index will consume more CPU resources.

Answer: BE

Explanation:

For rowstore tables and indexes, use the data compression feature to help reduce the size of the database. In addition to saving space, data compression can help improve performance of I/O intensive workloads because the data is stored in fewer pages and queries need to read fewer pages from disk.

Use columnstore archival compression to further reduce the data size for situations when you can afford extra time and CPU resources to store and retrieve the data.

NEW QUESTION 126

- (Exam Topic 5)

You have an Azure SQL database.

You need to implement a disaster recovery solution that meets the following requirements:

- Minimizes how long it takes to recover the database if a datacenter fails
- Minimizes administrative effort

What should you include in the solution?

- A. Azure Backup
- B. active geo-replication
- C. Azure Site Recovery
- D. auto-failover groups

Answer: D

NEW QUESTION 127

- (Exam Topic 5)

Your on-premises network contains a server that hosts a 60-TB database named DB 1. The network has a 10-Mbps internet connection.

You need to migrate DB 1 to Azure. The solution must minimize how long it takes to migrate the database. What should you use?

- A. Azure Migrate
- B. Data Migration Assistant (DMA)
- C. Azure Data BOX
- D. Azure Database Migration Service

Answer: C

Explanation:

<https://www.techtarget.com/searchitoperations/tip/Easily-transfer-VMs-to-the-cloud-with-Microsoft-Azure-Mig>

NEW QUESTION 130

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

| Name | Type | Configuration |
|------|--------------------|----------------------------------------------------------------------------|
| DB1 | Azure SQL Database | Hyperscale service tier No secondary replicas |
| App1 | Azure Web Apps | App1 has read-only access to DB1. There are multiple instances of App1. |

You need to create a read-only replica of DB1 and configure the App1 instances to use the replica. What should you do? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

Answer Area

To add read-only replicas of DB1:

▼

Create a replica on the same logical server.

Create a new logical server and configure geo-replication.

Create a new logical server and configure an auto-failover group.

To configure App1 instances to access the read-only replica:

▼

Add an ApplicationIntent entry to the connection string.

Add a MultiSubnetFailover entry to the App1 connection string.

Create a dedicated endpoint and configure the App1 connection string to point to the endpoint.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://sqlserverguides.com/read-only-replica-azure-sql/>

NEW QUESTION 132

- (Exam Topic 5)

You are designing an enterprise data warehouse in Azure Synapse Analytics that will store website traffic analytics in a star schema.

You plan to have a fact table for website visits. The table will be approximately 5 GB.

You need to recommend which distribution type and index type to use for the table. The solution must provide the fastest query performance.

What should you recommend? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

Distribution:

▼

Hash

Round robin

Replicated

Index:

▼

Clustered columnstore

Clustered

Nonclustered

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, table, chat or text message Description automatically generated

Box 1: Hash

Consider using a hash-distributed table when: The table size on disk is more than 2 GB.

The table has frequent insert, update, and delete operations. Box 2: Clustered columnstore

Clustered columnstore tables offer both the highest level of data compression and the best overall query performance.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribu> <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-index>

NEW QUESTION 136

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure Synapse Analytics dedicated SQL pool that contains a table named Table1. You have files that are ingested and loaded into an Azure Data Lake Storage Gen2 container named container1.

You plan to insert data from the files into Table1 and transform the data. Each row of data in the files will produce one row in the serving layer of Table1.

You need to ensure that when the source data files are loaded to container1, the DateTime is stored as an additional column in Table1.

Solution: In an Azure Synapse Analytics pipeline, you use a Get Metadata activity that retrieves the DateTime of the files.

Does this meet the goal?

A. Yes

B. No

Answer: B

Explanation:

Instead use a serverless SQL pool to create an external table with the extra column. Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/create-use-external-tables>

NEW QUESTION 141

- (Exam Topic 5)

You have the following Azure Resource Manager template.

```

...
  "variable": {
    "serverName": "azsqlserver0001"
  },
  "resources": [
    {
      "name": "[variables('serverName')]",
      "type": "Microsoft.Sql/servers",
      "apiVersion": "2019-06-01-preview",
      "location": "[parameters('location')]",
      "properties": {
        "administratorLogin": "[parameters('administratorLogin')]",
        "administratorLoginPassword": "[parameters('administratorLoginPassword')]",
        "version": "12.0"
      },
      "resources": [
        {
          "name": "[concat(variables('serverName'),'/',parameters('databaseName'))]",
          "type": "Microsoft.Sql/servers/databases",
          "apiVersion": "2020-08-01-preview",
          "location": "[parameters('location')]",
          "kind": "v12.0"
          "sku": {
            "name": "Standard",
            "tier": "Standard",
            "capacity": 10
          },
          "dependsOn": [
            "[concat('Microsoft.Sql/servers/', variables('serverName'))]"
          ],
          "properties": {
          },
          "resources": [
          ]
        }
      ]
    }
  ],
  ...

```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE:Each correct selection is worth one point.

| Statements | Yes | No |
|----------------------------------------------------------------------------|-----------------------|-----------------------|
| The template deploys a serverless Azure SQL database. | <input type="radio"/> | <input type="radio"/> |
| The template deploys a database to an Azure SQL Database managed instance. | <input type="radio"/> | <input type="radio"/> |
| The pricing tier of the database deployment is based on DTUs. | <input type="radio"/> | <input type="radio"/> |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

A screenshot of a computer Description automatically generated with low confidence

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/purchasing-models> <https://docs.microsoft.com/en-us/azure/azure-sql/database/single-database-create-arm-template-quickstart>

NEW QUESTION 143

- (Exam Topic 5)

You receive numerous alerts from Azure Monitor for an Azure SQL database.

You need to reduce the number of alerts. You must only receive alerts if there is a significant change in usage patterns for an extended period.

Which two actions should you perform? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. Set Threshold Sensitivity to High
- B. Set the Alert logic threshold to Dynamic
- C. Set the Alert logic threshold to Static
- D. Set Threshold Sensitivity to Low
- E. Set Force Plan to On

Answer: BD

Explanation:

B: Dynamic Thresholds continuously learns the data of the metric series and tries to model it using a set of algorithms and methods. It detects patterns in the data such as seasonality (Hourly / Daily / Weekly), and is able to handle noisy metrics (such as machine CPU or memory) as well as metrics with low dispersion (such as availability and error rate).

D: Alert threshold sensitivity is a high-level concept that controls the amount of deviation from metric behavior required to trigger an alert.

Low – The thresholds will be loose with more distance from metric series pattern. An alert rule will only trigger on large deviations, resulting in fewer alerts.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/alerts-dynamic-thresholds>

NEW QUESTION 147

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

| Name | Type |
|------|-------------------------------------------|
| App1 | Azure web app |
| db1 | Azure SQL database in the serverless tier |

App1 experiences transient connection errors and timeouts when it attempts to access db1 after extended periods of inactivity.

You need to modify db1 to resolve the issues experienced by App1 as soon as possible, without considering immediate costs

What you do?

- A. Increase the number of vCores allocated to db1.
- B. Decrease the auto-pause delay for db1.
- C. Disable auto-pause delay for db1.
- D. Enable automatic tuning for db1.

Answer: D

NEW QUESTION 148

- (Exam Topic 5)

You have an Azure virtual machine named VM1 that runs Windows Server 2022 and hosts a Microsoft SQL Server 2019 instance named SQL1. You need to configure SQL1 to use mixed mode authentication. Which procedure should you run?

- A. sp_addremotelogin
- B. xp_instance_regwrite
- C. sp_cnchange_users_login

D. xp_grant_login

Answer: B

NEW QUESTION 149

- (Exam Topic 5)

You are building an Azure Stream Analytics job to retrieve game data.

You need to ensure that the job returns the highest scoring record for each five-minute time interval of each game.

How should you complete the Stream Analytics query? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

SELECT as HighestScore

FROM input TIMESTAMP BY CreatedAt

GROUP BY

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, email Description automatically generated

Box 1: TopOne() OVER(PARTITION BY Game ORDER BY Score Desc)

TopOne returns the top-rank record, where rank defines the ranking position of the event in the window according to the specified ordering. Ordering/ranking is based on event columns and can be specified in ORDER BY clause.

Analytic Function Syntax:

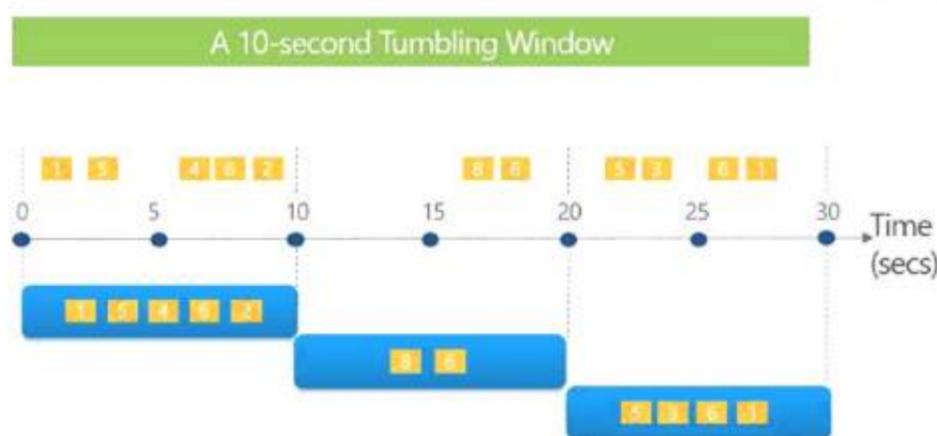
TopOne() OVER ([<PARTITION BY clause>] ORDER BY (<column name> [ASC |DESC])+ <LIMIT

DURATION clause> [<WHEN clause>])

Box 2: Tumbling(minute 5)

Tumbling window functions are used to segment a data stream into distinct time segments and perform a function against them, such as the example below. The key differentiators of a Tumbling window are that they repeat, do not overlap, and an event cannot belong to more than one tumbling window.

Tell me the count of Tweets per time zone every 10 seconds



```
SELECT TimeZone, COUNT(*) AS Count
FROM TwitterStream TIMESTAMP BY CreatedAt
GROUP BY TimeZone, TumblingWindow(second,10)
```

Reference:

<https://docs.microsoft.com/en-us/stream-analytics-query/topone-azure-stream-analytics> <https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/stream-analytics/stream-analytics-window-fun>

NEW QUESTION 153

- (Exam Topic 5)

You are creating a new notebook in Azure Databricks that will support R as the primary language but will also support Scala and SQL.

Which switch should you use to switch between languages?

- A. \[<language>]
- B. %<language>
- C. \[<language>]
- D. @<language>

Answer: B

Explanation:

You can override the default language by specifying the language magic command %<language> at the beginning of a cell. The supported magic commands are: %python, %r, %scala, and %sql.

Reference:

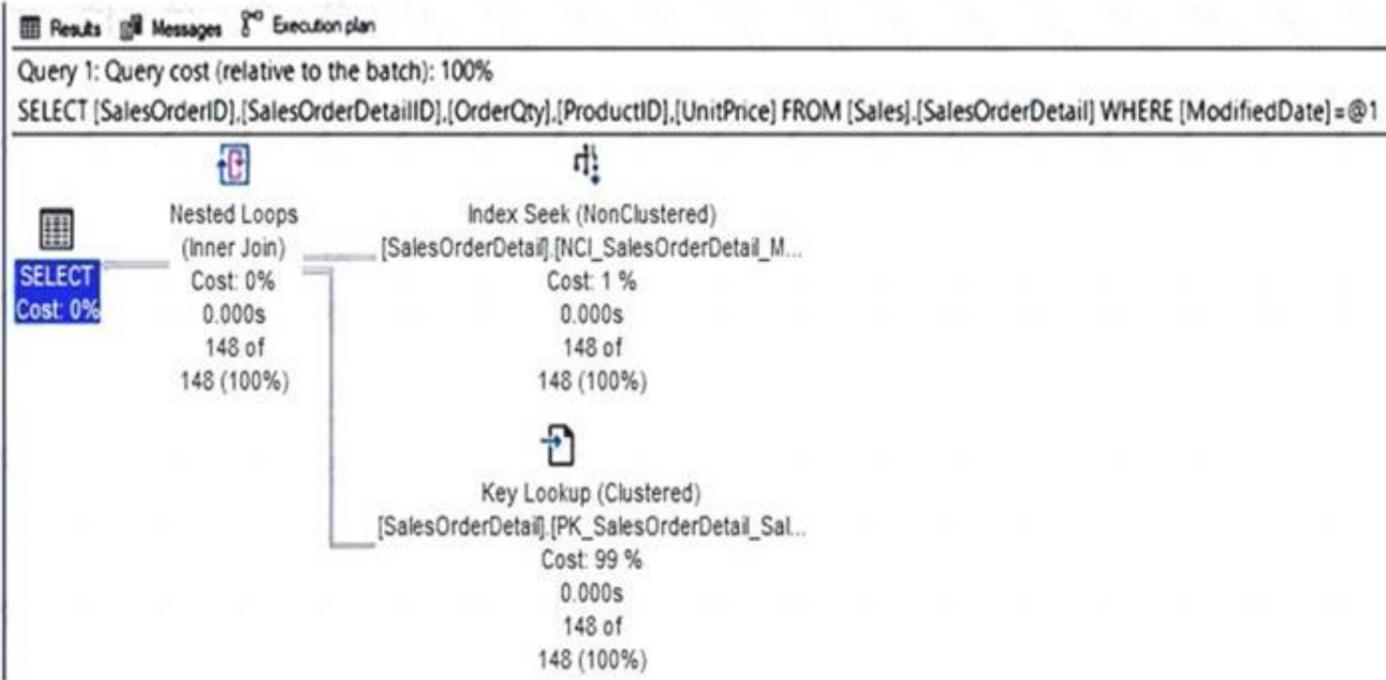
<https://docs.microsoft.com/en-us/azure/databricks/notebooks/notebooks-use>

NEW QUESTION 155

- (Exam Topic 5)

You have an Azure SQL database.

You have a query and the associated execution plan as shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE:Each correct selection is worth one point.

The performance issue stems from the [answer choice] operator.

▼

- Select
- Index Seek
- Key Lookup
- Nested Loops

The performance issue can be resolved by adding include columns to the [answer choice].

▼

- heap
- clustered index
- nonclustered index

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, email Description automatically generated

Box 1: Key Lookup

The Key Lookup cost is 99% so that is the performance bottleneck. Box 2: nonclustered index

The key lookup on the clustered index is used because the nonclustered index does not include the required columns to resolve the query. If you add the required columns to the nonclustered index, the key lookup will not be required.

NEW QUESTION 156

- (Exam Topic 5)

You have an Azure Synapse Analytics workspace named WS1 that contains an Apache Spark pool named Pool1.

You plan to create a database named DB1 in Pool1.

You need to ensure that when tables are created in DB1, the tables are available automatically as external tables to the built-in serverless SQL pool.

Which format should you use for the tables in DB1?

- A. JSON
- B. CSV
- C. Parquet
- D. ORC

Answer: C

Explanation:

Serverless SQL pool can automatically synchronize metadata from Apache Spark. A serverless SQL pool database will be created for each database existing in serverless Apache Spark pools.

For each Spark external table based on Parquet and located in Azure Storage, an external table is created in a serverless SQL pool database. As such, you can shut down your Spark pools and still query Spark external tables from serverless SQL pool.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-storage-files-spark-tables>

NEW QUESTION 161

- (Exam Topic 5)

You are designing a security model for an Azure Synapse Analytics dedicated SQL pool that will support multiple companies.

You need to ensure that users from each company can view only the data of their respective company. Which two objects should you include in the solution? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. a column encryption key
- B. asymmetric keys
- C. a function
- D. a custom role-based access control (RBAC) role
- E. a security policy

Answer: DE

Explanation:

Azure RBAC is used to manage who can create, update, or delete the Synapse workspace and its SQL pools, Apache Spark pools, and Integration runtimes. Define and implement network security configurations for resources related to your dedicated SQL pool with Azure Policy.

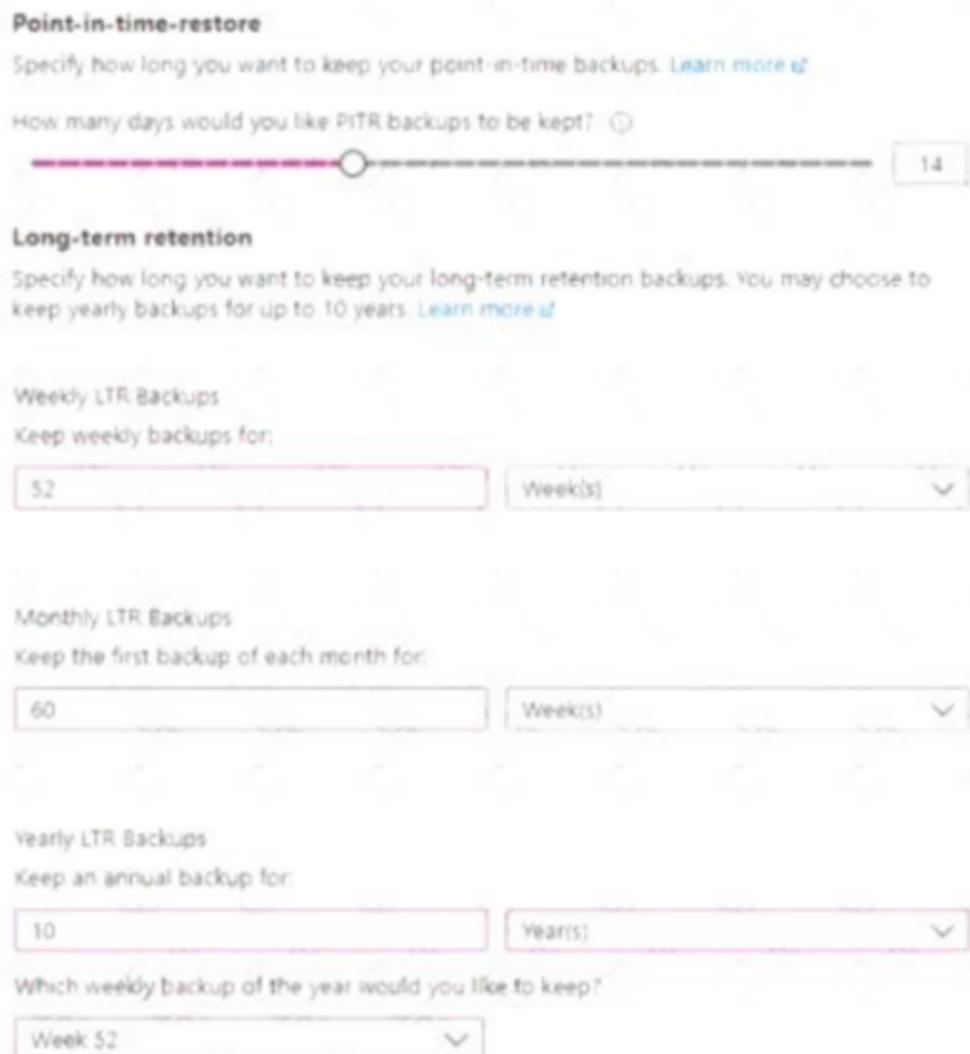
Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/security/synapse-workspace-synapse-rbac> <https://docs.microsoft.com/en-us/security/benchmark/azure/baselines/synapse-analytics-security-baseline>

NEW QUESTION 166

- (Exam Topic 5)

You configure backup for an Azure SQL database as shown in the following exhibit.



The screenshot shows the backup configuration for an Azure SQL database. It includes the following sections:

- Point-in-time-restore:** A slider set to 14 days. Text: "Specify how long you want to keep your point-in-time backups. Learn more >"
- Long-term retention:** Text: "Specify how long you want to keep your long-term retention backups. You may choose to keep yearly backups for up to 10 years. Learn more >"
- Weekly LTR Backups:** "Keep weekly backups for:" with a text input of 52 and a dropdown menu set to "Week(s)".
- Monthly LTR Backups:** "Keep the first backup of each month for:" with a text input of 60 and a dropdown menu set to "Week(s)".
- Yearly LTR Backups:** "Keep an annual backup for:" with a text input of 10 and a dropdown menu set to "Year(s)".
- Which weekly backup of the year would you like to keep?:** A dropdown menu set to "Week 52".

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a [answer choice]

- point-time restore (PITR) backup
- point-time restore (PITR) backup.
- yearly long-term retention (LTR) backup.
- weekly long-term retention (LTR) backup.
- monthly long-term retention (LTR) backup.

After the 52nd weekly backup runs, there will be [answer choice] in long term retention.

- 65 backup copies
- 1 backup copy
- 52 backup copies
- 64 backup copies
- 65 backup copies

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a [answer choice]

- point-time restore (PITR) backup
- point-time restore (PITR) backup.
- yearly long-term retention (LTR) backup.
- weekly long-term retention (LTR) backup.
- monthly long-term retention (LTR) backup.

After the 52nd weekly backup runs, there will be [answer choice] in long term retention.

- 65 backup copies
- 1 backup copy
- 52 backup copies
- 64 backup copies
- 65 backup copies

NEW QUESTION 171

- (Exam Topic 5)
 You have a database on a SQL Server on Azure Virtual Machines instance.
 The current state of Query Store for the database is shown in the following exhibit.



To change Operation Mode (Actual) to Read write without losing any data, you must modify the [answer choice] setting.

- Max Size (MB)
- Query Store Capture Mode
- Size Based Cleanup Mode
- Operation Mode (Requested)

Query Store will retain [answer choice] queries for evaluation.

- all
- none of the
- a selective set of

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text Description automatically generated

NEW QUESTION 172

- (Exam Topic 5)
 You have an Azure subscription.
 You plan to deploy an Azure SQL database by using an Azure Resource Manager template.
 How should you complete the template? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
{
  "resources": [
    {
      "type": 
      "apiVersion": "2020-02-02-preview",
      "name": "[parameters('name1')]",
      "location": "[parameters('location')]",
      ...
      "resources": [
        {
          "type": "databases",
          "apiVersion": "2020-02-02-preview",
          ...
          "dependsOn": [
            "properties": [
              "tags": [
                "[resourceId('Microsoft.Sql/servers', concat(parameters('name1')))]"
              ]
            ]
          ]
        }
      ]
    }
  ]
}
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/single-database-create-arm-template-quickstart>

NEW QUESTION 177

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

| Name | Type | Description |
|--------------|--------------------------------------|----------------|
| SQL1 | SQL Server on Azure Virtual Machines | Not applicable |
| db1 | Microsoft SQL Server database | Hosted on SQL1 |
| mysqlbackups | General purpose v2 storage account | Not applicable |

You need to back up db1 to mysqlbackups, and then restore the backup to a new database named db2 that is hosted on SQL1. The solution must ensure that db1 is backed up to a stripe set.

Which three Transact-SQL statements should you execute in sequence? To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.

Statements

Answer Area

```
RESTORE DATABASE db2 FROM URL = URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup', RECOVERY,
MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup';
GO
```

```
RESTORE DATABASE db2 FROM URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_4.bak'
WITH RECOVERY,
MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
CREATE CREDENTIAL
[https://mysqlbackups.blob.core.windows.net/backups]
WITH IDENTITY = 'SHARED ACCESS SIGNATURE',
SECRET = '<SAS_TOKEN>'
GO
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/backups/db1_4.bak'
GO
```

```
CREATE CREDENTIAL [sqlbackup] WITH IDENTITY
=
'sqlsamplebackup'
, SECRET = '<mystorageaccountaccesskey>';
GO
```



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/sql-server-backup-to-url?view=sql-serv>

NEW QUESTION 179

- (Exam Topic 5)

You have an Azure SQL managed instance named SQLMI1 that has Resource Governor enabled and is used by two apps named App1 and App2.

You need to configure SQLMI1 to limit the CPU and memory resources that can be allocated to App1. Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|--------------------------------------------|-------------|
| Create a workload group. | |
| Create a user-defined classifier function. | |
| Modify Resource Governor. | ⬅ |
| Create a contained database user. | ➡ |
| Create a resource pool. | ⬆ |
| | ⬇ |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text, table Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor?view=sql-server> <https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/create-and-test-a-classifier-user-def>

NEW QUESTION 180

- (Exam Topic 5)

You have an Azure subscription that contains a server named Server1. Server1 hosts two Azure SQL databases named DB1 and DB2.

You plan to deploy a Windows app named App1 that will authenticate to DB2 by using SQL authentication. You need to ensure that App1 can access DB2. The solution must meet the following requirements:

- App1 must be able to view only DB2.
- Administrative effort must be minimized. What should you create?

- A. a contained database user for App1 on DB2
- B. a login for App1 on Server1
- C. a contained database user from an external provider for App1 on DB2
- D. a contained database user from a Windows login for App1 on DB2

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/contained-database-users-making-your-databa>

NEW QUESTION 181

- (Exam Topic 5)

You have an Azure SQL logical server. You run the following script.

```
CREATE DATABASE Sales
GO
CREATE TABLE [dbo].[Orders]
(
    [OrderID] INT NOT NULL,
    [OrderDescription] NVARCHAR (MAX) NOT NULL,
    [Timestamp] Datetime2 NOT NULL
)
WITH (
    SYSTEM_VERSIONING = ON,
    LEDGER = ON
);
GO
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point

| Statements | Yes | No |
|---------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| The <code>orders</code> table will allow only rows to be inserted. | <input type="radio"/> | <input type="radio"/> |
| To create additional tables in the Sales database, the <code>LEDGER = ON</code> parameter must be used. | <input type="radio"/> | <input type="radio"/> |
| To ensure that a timestamp is added to each row in the <code>orders</code> table, the <code>GENERATED ALWAYS</code> | <input type="radio"/> | <input type="radio"/> |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- Yes
- No No

NEW QUESTION 186

- (Exam Topic 5)

You have an Azure subscription that contains the following resources:

- 10 Azure SQL databases
- Five Azure SQL managed instances
- Five instances of SQL Server on Azure Virtual Machines

You need to implement a centralized monitoring solution for all the Azure SQL resources. The solution must minimize administrative effort. What should you include in the solution?

- A. Log Analytics
- B. Azure SQL Analytics
- C. Query Performance Insight
- D. SQL Insights

Answer: B

NEW QUESTION 191

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have SQL Server 2019 on an Azure virtual machine.

You are troubleshooting performance issues for a query in a SQL Server instance.

To gather more information, you query `sys.dm_exec_requests` and discover that the wait type is `PAGELATCH_UP` and the `wait_resource` is `2:3:905856`.

You need to improve system performance. Solution: You shrink the transaction log file. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Reference:

<https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention>

NEW QUESTION 192

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine named SQL1. SQL1 has an agent job to back up all databases.

You add a user named `dbadmin1` as a SQL Server Agent operator. You need to ensure that `dbadmin1` receives an email alert if a job fails.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|----------------------------------------------------|-------------|
| Create a job alert | |
| Create a job notification | |
| Enable Database Mail | ⤴ |
| Enable the email settings for the SQL Server Agent | ⤵ |
| Create a job target | ⤴ ⤵ |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Enable the email settings for the SQL Server Agent.
 To send a notification in response to an alert, you must first configure SQL Server Agent to send mail. Step 2: Create a job alert
 Step 3: Create a job notification Example:
 -- adds an e-mail notification for the specified alert (Test Alert)
 -- This example assumes that Test Alert already exists
 -- and that François Ajenstat is a valid operator name. USE msdb ;
 GO
 EXEC dbo.sp_add_notification
 @alert_name = N'Test Alert',
 @operator_name = N'François Ajenstat',
 @notification_method = 1 ; GO
 Reference:
<https://docs.microsoft.com/en-us/sql/ssms/agent/notify-an-operator-of-job-status> <https://docs.microsoft.com/en-us/sql/ssms/agent/assign-alerts-to-an-operator>

NEW QUESTION 197

- (Exam Topic 5)
 You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.
 You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.
 You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:
 > Ensure that VM1 cannot connect to any Azure SQL Server other than SqlSrv1.
 > Restrict network connectivity to SqlSrv1. What should you create on VNet1?

- A. a VPN gateway
- B. a service endpoint
- C. a private link
- D. an ExpressRoute gateway

Answer: B

Explanation:

Azure Private Link enables you to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a private endpoint in your virtual network.
 Traffic between your virtual network and the service travels the Microsoft backbone network. Exposing your service to the public internet is no longer necessary.
 Reference:
<https://docs.microsoft.com/en-us/azure/private-link/private-link-overview>

NEW QUESTION 201

- (Exam Topic 5)
 You have an Azure SQL managed instance.
 You need to gather the last execution of a query plan and its runtime statistics. The solution must minimize the impact on currently running queries.
 What should you do?

- A. Generate an estimated execution plan.
- B. Generate an actual execution plan.
- C. Run sys.dm_exec_query_plan_stats.
- D. Generate Live Query Statistics.

Answer: C

Explanation:

Reference:
<https://docs.microsoft.com/en-us/sql/relational-databases/system-dynamic-management-views/sys-dm-exec-quer>

NEW QUESTION 205

- (Exam Topic 5)

You have an Azure SQL database named db1 on a server named server1. You use Query Performance Insight to monitor db1.

You need to modify the Query Store configuration to ensure that performance monitoring data is available as soon as possible.

Which configuration setting should you modify and which value should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Configuration setting:

| |
|-----------------------------|
| DATA_FLUSH_INTERVAL_SECONDS |
| INTERVAL_LENGTH_MINUTES |
| MAX_PLANS_PER_QUERY |
| QUERY_CAPTURE_MODE |

Value:

| |
|--------|
| 1 |
| 60 |
| CUSTOM |
| ON |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

NEW QUESTION 208

- (Exam Topic 5)

You need to use an Azure Resource Manager (ARM) template to deploy an Azure virtual machine that will host a Microsoft SQL Server instance. The solution must maximize disk I/O performance for the SQL Server database and log files

How should you complete the template? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

```

"variables": {
  "dataDisks": {
    "caching":  "dataDiskCount": 8, "logDisksCount": 1,
    ...
  }
}

"resources": [
  ...
  "osDisk": {
    ...
    "copy": [
      {
        "name": "dataDisks", "count": "[add(variables('dataDiskCount'), variables('logDisksCount'))]",
        "input": {"lun": "[copyIndex('dataDisks')]", "createOption": "empty",
        "caching": "[if(greaterOrEquals(copyIndex('dataDisks'), parameters('dataDiskCount')),
          variables('dataDisks').caching )]", "diskSizeGB": 1023,

```

| |
|-----------|
| None |
| ReadOnly |
| ReadWrite |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Read onlyReadWrite

NEW QUESTION 209

- (Exam Topic 5)

You have a SQL Server on Azure Virtual Machines instance that hosts a database named Db1. You need to configure the autogrow and autoshrink settings for

DB1.
 Which statements should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Autogrow: ALTER DATABASE MODIFY File and Filegroup options
 ALTER DATABASE SCOPED CONFIGURATION
 ALTER DATABASE SET options

Autoshrink: ALTER DATABASE MODIFY File and Filegroup options
 ALTER DATABASE SCOPED CONFIGURATION
 ALTER DATABASE SET options

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
<https://learn.microsoft.com/en-us/troubleshoot/sql/admin/considerations-autogrow-autoshrink>

NEW QUESTION 210

- (Exam Topic 5)

You have an on-premises datacenter that contains a 2-TB Microsoft SQL Server 2019 database named DB1. You need to recommend a solution to migrate DB1 to an Azure SQL managed instance. The solution must minimize downtime and administrative effort. What should you include in the recommendation?

- A. Log Replay Service (LRS)
- B. log shipping
- C. transactional replication
- D. SQL Data Sync

Answer: B

NEW QUESTION 213

- (Exam Topic 5)

You have several Azure SQL databases on the same Azure SQL Database server in a resource group named ResourceGroup1. You must be alerted when CPU usage exceeds 80 percent for any database. The solution must apply to any additional databases that are created on the Azure SQL server. Which resource type should you use to create the alert?

- A. Resource Groups
- B. SQL Servers
- C. SQL Databases
- D. SQL Virtual Machines

Answer: C

Explanation:
 There are resource types related to application code, compute infrastructure, networking, storage + databases. You can deploy up to 800 instances of a resource type in each resource group.
 Some resources can exist outside of a resource group. These resources are deployed to the subscription, management group, or tenant. Only specific resource types are supported at these scopes.
 Reference:
<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/resource-providers-and-types>

NEW QUESTION 214

- (Exam Topic 5)

You have an Azure Databricks workspace named workspace1 in the Standard pricing tier. Workspace1 contains an all-purpose cluster named cluster1. You need to reduce the time it takes for cluster1 to start and scale up. The solution must minimize costs. What should you do first?

- A. Upgrade workspace1 to the Premium pricing tier.
- B. Configure a global init script for workspace1.
- C. Create a pool in workspace1.
- D. Create a cluster policy in workspace1.

Answer: C

Explanation:
 You can use Databricks Pools to Speed up your Data Pipelines and Scale Clusters Quickly.
 Databricks Pools, a managed cache of virtual machine instances that enables clusters to start and scale 4 times faster.

Reference:
<https://databricks.com/blog/2019/11/11/databricks-pools-speed-up-data-pipelines.html>

NEW QUESTION 216

- (Exam Topic 5)

You are creating a managed data warehouse solution on Microsoft Azure.

You must use PolyBase to retrieve data from Azure Blob storage that resides in parquet format and load the data into a large table called FactSalesOrderDetails.

You need to configure Azure Synapse Analytics to receive the data.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Answer Area

- Create an external data source for Azure Blob storage.
- Create a master key on database.
- Enable Transparent Data Encryption.
- Create the external table FactSalesOrderDetails.
- Load the data to a staging table.
- Create an external file format to map the parquet files.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, chat or text message Description automatically generated

To query the data in your Hadoop data source, you must define an external table to use in Transact-SQL queries. The following steps describe how to configure the external table.

Step 1: Create a master key on database.

* 1. Create a master key on the database. The master key is required to encrypt the credential secret. (Create a database scoped credential for Azure blob storage.)

Step 2: Create an external data source for Azure Blob storage.

* 2. Create an external data source with CREATE EXTERNAL DATA SOURCE.. Step 3: Create an external file format to map the parquet files.

* 3. Create an external file format with CREATE EXTERNAL FILE FORMAT. Step 4. Create an external table FactSalesOrderDetails

* 4. Create an external table pointing to data stored in Azure storage with CREATE EXTERNAL TABLE. Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/polybase/polybase-configure-azure-blob-storage>

NEW QUESTION 219

- (Exam Topic 5)

You have an Azure SQL database named that contains a table named Table1. You run a query to bad data into Table1.

The performance Of Table1 during the load operation are shown in exhibit.



To reduce how long it takes to complete the query you must [answer choice].

- scale the resource
- use an elastic pool
- perform query tuning

To reduce the log IO load of the operation, the query must be updated to use [answer choice] table.

- a temporary
- an In-Memory OTLP durable
- an In-Memory OTLP non durable

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

To reduce how long it takes to complete the query you must [answer choice].

- scale the resource
- use an elastic pool
- perform query tuning

To reduce the log IO load of the operation, the query must be updated to use [answer choice] table.

- a temporary
- an In-Memory OTLP durable
- an In-Memory OTLP non durable

NEW QUESTION 220

- (Exam Topic 5)

You have an Azure SQL database named DB1 that contains a nonclustered index named index1. End users report slow queries when they use index1. You need to identify the operations that are being performed on the index. Which dynamic management view should you use?

- A. `sys.dm_exec_query_plan_stats`
- B. `sys.dm_db_index_physical_stats`
- C. `sys.dm_db_index_operational_stats`
- D. `sys.dm_db_index_usage_stats`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 221

- (Exam Topic 5)

You have an Azure SQL managed instance that hosts multiple databases.

You need to configure alerts for each database based on the diagnostics telemetry of the database. What should you use?

- A. Azure SQL Analytics alerts based on metrics
- B. SQL Health Check alerts based on diagnostics logs
- C. SQL Health Check alerts based on metrics
- D. Azure SQL Analytics alerts based on diagnostics logs

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/metrics-diagnostic-telemetry-logging-streaming-expo>

NEW QUESTION 224

- (Exam Topic 5)

You have an Azure SQL database named DB1. DB1 contains a table that has a column named Col1. You need to encrypt the data in Col1.

Which four actions should you perform for DB1 in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Answer Area

Create a database master key.

Create a column master key.

Open the symmetric key.

Create a certificate.

Update Col1.

Create a symmetric key.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

Reference:

<https://www.sqlshack.com/an-overview-of-the-column-level-sql-server-encryption/>

NEW QUESTION 226

- (Exam Topic 5)

You deploy a database to an Azure SQL Database managed instance.

You need to prevent read queries from blocking queries that are trying to write to the database. Which database option should set?

- A. PARAMETERIZATIONtoFORCED
- B. PARAMETERIZATIONtoSIMPLE
- C. Delayed Durability toForced
- D. READ_COMMITTED_SNAPSHOTtoON

Answer: D

Explanation:

In SQL Server, you can also minimize locking contention while protecting transactions from dirty reads of uncommitted data modifications using either:

- > The READ COMMITTED isolation level with the READ_COMMITTED_SNAPSHOT database option set to ON.
- > The SNAPSHOT isolation level.

If READ_COMMITTED_SNAPSHOT is set to ON (the default on SQL Azure Database), the Database Engine uses row versioning to present each statement with a transactionally consistent snapshot of the data as it existed at the start of the statement. Locks are not used to protect the data from updates by other transactions.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/set-transaction-isolation-level-transact-sql>

NEW QUESTION 230

- (Exam Topic 5)

You have an Azure SQL database named sqldb1.

You need to minimize the possibility of Query Store transitioning to a read-only state. What should you do?

- A. Halve the value of Data Flush Interval.
- B. Double the value of Statistics Collection Interval.
- C. Halve the value of Statistics Collection Interval.
- D. Double the value of Data Flush Interval.

Answer: A

Explanation:

The Max Size (MB) limit isn't strictly enforced. Storage size is checked only when Query Store writes data to disk. This interval is set by the Data Flush Interval (Minutes) option. If Query Store has breached the Maximum size limit between storage size checks, it transitions to read-only mode. Reference: <https://docs.microsoft.com/en-us/sql/relational-databases/performance/best-practice-with-the-query-store>

NEW QUESTION 235

- (Exam Topic 5)

You have a 50-TB Microsoft SQL Server database named DB1.

You need to reduce the time it takes to perform database consistency checks of DB1.

Which Transact-SQL command should you run? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

DBCC CHECKDB ([DB1],

| | |
|----------------|---|
| | ▼ |
| NOINDEX | |
| REPAIR_FAST | |
| REPAIR_REBUILD | |

 with

| | |
|---------------|---|
| | ▼ |
| ALL_ERRORMSG | |
| NO_INFOMSGS | |
| PHYSICAL_ONLY | |

)

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated with low confidence

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-checkdb-transact-sql?view=sql-ser>

NEW QUESTION 236

- (Exam Topic 5)

You have a burstable Azure virtual machine named VMI that hosts an instance of Microsoft SQL Server. You need to attach an Azure ultra disk to VMI. The solution must minimize downtime on VMI.

In which order should you perform the actions? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Actions

| |
|-----------------------------------------------------|
| Attach the ultra disk. |
| Stop and deallocate VM1. |
| Set Enable Ultra disk compatibility to Yes . |
| Resize VM1. |
| Start VM1. |

Answer Area

| |
|--|
| |
| |
| |
| |
| |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions

| |
|-----------------------------------------------------|
| Attach the ultra disk. |
| Stop and deallocate VM1. |
| Set Enable Ultra disk compatibility to Yes . |
| Resize VM1. |
| Start VM1. |

Answer Area

| |
|-----------------------------------------------------|
| Stop and deallocate VM1. |
| Attach the ultra disk. |
| Set Enable Ultra disk compatibility to Yes . |
| Resize VM1. |
| Start VM1. |

NEW QUESTION 237

- (Exam Topic 5)

You have an on-premises app named App1 that stores data in an on-premises Microsoft SQL Server 2016 database named DB1.

You plan to deploy additional instances of App1 to separate Azure regions. Each region will have a separate instance of App1 and DB1. The separate instances of DB1 will sync by using Azure SQL Data Sync.

You need to recommend a database service for the deployment. The solution must minimize administrative effort.

What should you include in the recommendation?

- A. Azure SQL Managed instance
- B. Azure SQL Database single database
- C. Azure Database for PostgreSQL
- D. SQL Server on Azure virtual machines

Answer: B

Explanation:

Azure SQL Database single database supports Data Sync. Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/features-comparison>

NEW QUESTION 242

- (Exam Topic 5)

You need to recommend an availability strategy for an Azure SQL database. The strategy must meet the following requirements:

- > Support failovers that do not require client applications to change their connection strings.
- > Replicate the database to a secondary Azure region.
- > Support failover to the secondary region. What should you include in the recommendation?

- A. failover groups
- B. transactional replication
- C. Availability Zones
- D. geo-replication

Answer: A

Explanation:

Active geo-replication is an Azure SQL Database feature that allows you to create readable secondary databases of individual databases on a server in the same or different data center (region).

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview>

NEW QUESTION 243

- (Exam Topic 5)

From a website analytics system, you receive data extracts about user interactions such as downloads, link clicks, form submissions, and video plays.

The data contains the following columns:

| Name | Sample value |
|--------------------|---------------------|
| Date | 15 Jan 2021 |
| EventCategory | Videos |
| EventAction | Play |
| EventLabel | Contoso Promotional |
| ChannelGrouping | Social |
| TotalEvents | 150 |
| UniqueEvents | 120 |
| SessionsWithEvents | 99 |

You need to design a star schema to support analytical queries of the data. The star schema will contain four tables including a date dimension.

To which table should you add each column? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

EventCategory: ▼
 DimChannel
 DimDate
 DimEvent
 FactEvents

ChannelGrouping: ▼
 DimChannel
 DimDate
 DimEvent
 FactEvents

TotalEvents: ▼
 DimChannel
 DimDate
 DimEvent
 FactEvents

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application, table Description automatically generated

Box 1: FactEvents

Fact tables store observations or events, and can be sales orders, stock balances, exchange rates, temperatures, etc.

Box 2: DimChannel

Dimension tables describe business entities – the things you model. Entities can include products, people, places, and concepts including time itself. The most consistent table you'll find in a star schema is a date dimension table. A dimension table contains a key column (or columns) that acts as a unique identifier, and descriptive columns.

Box 3: DimEvent Reference:

<https://docs.microsoft.com/en-us/power-bi/guidance/star-schema>

NEW QUESTION 245

- (Exam Topic 5)

You have an Azure subscription.

You need to deploy an Azure SQL managed instance that meets the following requirements:

- Optimize latency.
- Maximize the memory-to-vCore ratio.

Which service tier and hardware generation should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Service tier: ▼
 Business Critical
 General Purpose
 Hyperscale

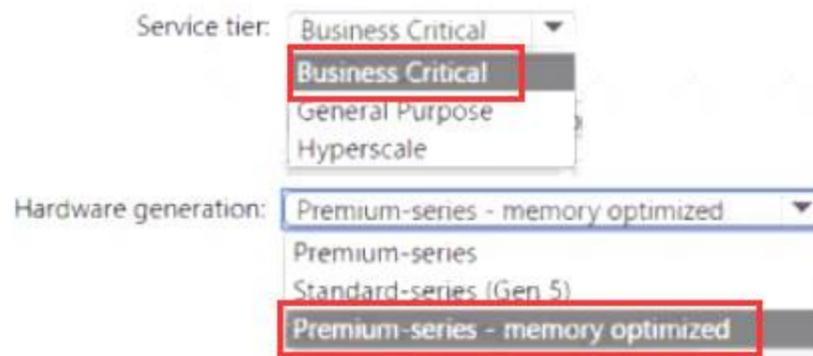
Hardware generation: ▼
 Premium-series
 Standard-series (Gen 5)
 Premium-series - memory optimized

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area



NEW QUESTION 249

- (Exam Topic 4)

You need to design a data retention solution for the Twitter feed data records. The solution must meet the customer sentiment analytics requirements. Which Azure Storage functionality should you include in the solution?

- A. time-based retention
- B. change feed
- C. lifecycle management
- D. soft delete

Answer: C

Explanation:

The lifecycle management policy lets you: Delete blobs, blob versions, and blob snapshots at the end of their lifecycles Reference: <https://docs.microsoft.com/en-us/azure/storage/blobs/storage-lifecycle-management-concepts>

NEW QUESTION 252

- (Exam Topic 3)

Which windowing function should you use to perform the streaming aggregation of the sales data?

- A. Sliding
- B. Hopping
- C. Session
- D. Tumbling

Answer: D

Explanation:

Scenario: The sales data, including the documents in JSON format, must be gathered as it arrives and analyzed online by using Azure Stream Analytics. The analytics process will perform aggregations that must be done continuously, without gaps, and without overlapping. Tumbling window functions are used to segment a data stream into distinct time segments and perform a function against them, such as the example below. The key differentiators of a Tumbling window are that they repeat, do not overlap, and an event cannot belong to more than one tumbling window. Timeline Description automatically generated

Tell me the count of Tweets per time zone every 10 seconds



```
SELECT TimeZone, COUNT(*) AS Count
FROM TwitterStream TIMESTAMP BY CreatedAt
GROUP BY TimeZone, TumblingWindow(second,10)
```

Reference:

<https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/stream-analytics/stream-analytics-window-fun>

NEW QUESTION 253

- (Exam Topic 1)

You need to recommend the appropriate purchasing model and deployment option for the 30 new databases. The solution must meet the technical requirements

and the business requirements.
 What should you recommend? To answer, select the appropriate options in the answer area.
 NOTE: Each correct selection is worth one point.

Purchasing model: ▼

Deployment option: ▼

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: DTU
 Scenario:

- > The 30 new databases must scale automatically.
- > Once all requirements are met, minimize costs whenever possible.

You can configure resources for the pool based either on the DTU-based purchasing model or the vCore-based purchasing model. In short, for simplicity, the DTU model has an advantage. Plus, if you're just getting started with Azure SQL Database, the DTU model offers more options at the lower end of performance, so you can get started at a lower price point than with vCore.

Box 2: An Azure SQL database elastic pool

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in Azure SQL Database enable SaaS developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview> <https://docs.microsoft.com/en-us/azure/azure-sql/database/reserved-capacity-overview>

NEW QUESTION 258

- (Exam Topic 1)

You create all of the tables and views for ResearchDB1.

You need to implement security for ResearchDB1. The solution must meet the security and compliance requirements.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|--------------------------------------------------------------------|-------------|
| Run the Always Encrypted wizard. | |
| Create an Azure Key Vault instance and generate a secret. | |
| Create an Azure Key Vault instance and configure an access policy. | ⬅️ ⬆️ |
| Create an Azure AD managed identity. | ➡️ ⬇️ |
| Register ResearchApp1 to Azure AD. | |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/always-encrypted-azure-key-vault-configure?tabs=az>

NEW QUESTION 262

- (Exam Topic 1)

You need to configure user authentication for the SERVER1 databases. The solution must meet the security and compliance requirements.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Actions | Answer Area |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Create a user in the master database | |
| Modify the Azure SQL server administrator account | |
| Create contained database users |   |
| Create an Azure AD administrator for the logical server |   |
| Connect to the databases by using an Azure AD account | |
| Enable the contained database authentication option | |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Scenario: Authenticate database users by using Active Directory credentials.

The configuration steps include the following procedures to configure and use Azure Active Directory authentication.

- > Create and populate Azure AD.
- > Optional: Associate or change the active directory that is currently associated with your Azure Subscription.
- > Create an Azure Active Directory administrator. (Step 1)
- > Configure your client computers.
- > Create contained database users in your database mapped to Azure AD identities. (Step 2)
- > Connect to your database by using Azure AD identities. (Step 3)

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/authentication-aad-overview>

NEW QUESTION 266

- (Exam Topic 1)

You need to recommend a solution to ensure that the customers can create the database objects. The solution must meet the business goals.

What should you include in the recommendation?

- A. For each customer, grant the customer ddl_admin to the existing schema.
- B. For each customer, create an additional schema and grant the customer ddl_admin to the new schema.
- C. For each customer, create an additional schema and grant the customer db_writerto the new schema.
- D. For each customer, grant the customer db_writerto the existing schema.

Answer: B

NEW QUESTION 267

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

DP-300 Practice Exam Features:

- * DP-300 Questions and Answers Updated Frequently
- * DP-300 Practice Questions Verified by Expert Senior Certified Staff
- * DP-300 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * DP-300 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The DP-300 Practice Test Here](#)