Question 46

Domain: Design and implement data storage

You work in ATR company as Azure Data Engineer. You have been assigned a task to create and manage the hierarchies in Azure Analysis Services. Here is the list of some tasks:

1. Change the name of a hierarchy
2. Change the name of a child level
3. Change the order of a child level in a hierarchy
4. Add a child level to the given hierarchy
5. Remove a child level from the given hierarchy

Choose the tasks that you can perform while editing the hierarchies.

- A. Only I, II, and III
- B. Only I, IV, and V
- C. Only II and III
- D. Only IV and V
- E. All the aboveright

Explanation:

Correct Answer: E

Hierarchies can be created, edited, or even deleted in Azure Analysis Services. While editing the hierarchies, Azure Analysis Services allows renaming a hierarchy, changing the order for the child levels, renaming a child level, removing/deleting a child level from a hierarchy, adding extra columns as child levels, displaying the source name of a child level (the column name), and hiding a child level if it has the same name as the hierarchy parent level.

- **Option A is incorrect.** Not only I, II, and III, but all the given tasks can be performed while editing the hierarchies.
- **Option B is incorrect.** Not only I, IV, and V, but all the given tasks can be performed while editing the hierarchies.
- **Option C is incorrect.** Not only II and III, but all of the given tasks can also be performed while editing the hierarchies.
- **Option D is incorrect**. Not only IV and V, but all the given tasks can also be performed while editing the hierarchies.
- **Option E is correct.** All of the given tasks can be performed while editing the hierarchies.

Reference:

To know more about creating and managing hierarchies, please visit the below-given link:

- https://docs.microsoft.com/en-us/analysis-services/tabular-models/create-and-manage-hierarchies-ssas-tabular?view=asallproducts-allversions

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View Queries

Question 47

Domain: Design and develop data processing

There are a number of JSON properties used in the JSON definition of a Spark Activity. From the given list of properties, choose the properties that are required/mandatory in the JSON definition. (Select all that are applicable)

- A. LinkedServiceNameright
- B. SparkJobLinkedService

- C. rootPathright
- D. className

- E. proxyUser

- F. All of the above

Explanation:

Correct Answers: A and C
Check the below table to know the JSON properties used in the JSON definition. The table also provides the description for each property and also whether that property is required or not.

- **Option A is correct**. linkedServiceName is a required property in JSON definition.
- **Option B is incorrect**. SparkJobLinkedService is not a required property in JSON definition.
- **Option C is correct.** rootPath is a required property in JSON definition.
- **Option D is incorrect.** className is not a required property in JSON definition.
- **Option E is incorrect**. proxyUser is not a required property in JSON definition.
- **Option F is incorrect**. Out of the given options, only linkedServiceName and rootPath are the required JSON properties.

Reference:
To know more about transforming data using spark, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/transform-data-using-spark

Ask our Experts

View Queries

Question 48

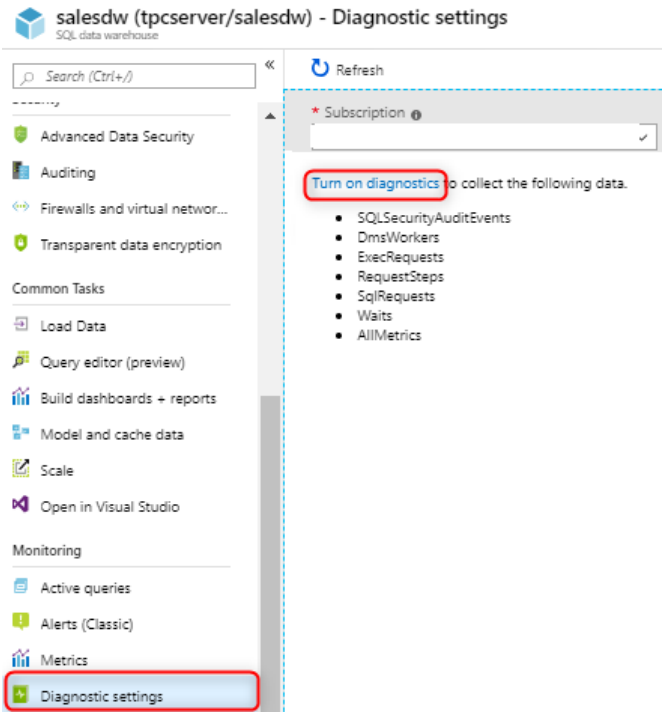
Domain: Design and develop data processing

You are an Azure data engineer in a well-reputed multinational company. You need to create a workspace to accomplish the assigned task. Which of the following command would you use to create a new Azure Databricks workspace?

- A. az databricks workspace create right
- B. azure databricks workspace create
- C. create az databricks workspace
- D. create azure databricks workspace
- E. None of these

Explanation:

Correct Answer: A
az databricks workspace create command is used to create a new azure databricks workspace. The syntax for creating the new workspace is as given below:



- **Option A is correct.** az databricks workspace create command is used to create an Azure databricks workspace.
- **Option B is incorrect.** azure databricks workspace create is not the right syntax to create the workspace.
- **Option C is incorrect.** There is no command like create az databricks workspace.
- **Option D is incorrect.** There is no command like create azure databricks workspace.
- **Option E is incorrect.** az databricks workspace create command is used to create an Azure databricks workspace.

Reference:
To know more about creating azure resources, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/devops/pipelines/apps/cd/azure/build-data-pipeline?view=azure-devops

Ask our Experts

View Queries

Question 49

Domain: Design and develop data processing

Which of the following Read-only service-defined variables would you use in the AutoScale formula when you want scaling depending upon the number of tasks that are running at a specific point in time?

- A. $ActiveTasks
- B. $RunningTasksright
- C. $SucceededTasks
- D. $PendingTasks

Explanation:

Correct Answer: B
$RunningTasks variable should be used while scaling depending upon the number of tasks running at a point in time.

- **Option A is incorrect.** $ActiveTasks variable is used when scaling depending upon the number of tasks that are queued up to run.
- **Option B is correct.** $RunningTasks variable should be used when scaling depending upon the number of tasks running at a point in time.
- **Option C is incorrect.** $SucceededTasks is used for the number of tasks completed successfully.
- **Option D is incorrect.** $PendingTasks is used for the number of tasks that are queued or running.

Reference:
To know more about creating automatic formulas, please visit the following link:

- https://docs.microsoft.com/en-us/azure/batch/batch-automatic-scaling

Ask our Experts

View Queries

Question 50

Domain: Design and develop data processing

Azure Stream Analytics is a PaaS event processing engine. Below given is the list of key features or benefits of using Azure Stream Analytics to process streaming data. From the list, choose the incorrect statement.

- A. It eases writing complex time-based queries and aggregations over the data produced by connected devices, sensors, or applications.
- B. Stream Analytics processes the data in real-time, empowering powerful insights that further help in real-time decision-making.
- C. It enables writing and testing transformation queries in the Azure portal
- D. Integration with Azure Blob storageright
- E. None of these

Explanation:

Correct Answer: D
Integration with Azure Blob storage is not the main feature or benefit of using Azure Stream Analytics to process streaming data. The integration with Blob storage can be used for the processing of static data.

- **Option A is incorrect**. Azure Stream Analytics eases writing complex time-based queries and aggregations over the data produced by connected devices, sensors, or applications.
- **Option B is incorrect.** It is true that Stream Analytics processes the data in real-time, empowering powerful insights that further help in real-time decision-making.
- **Option C is incorrect.** Azure Stream Analytics enables writing and testing transformation queries in the Azure portal.
- **Option D is correct.** Integration with Azure Blob storage is not the main feature or benefit of using Azure Stream Analytics to process streaming data.
- **Option E is incorrect.** The statement "Integration with Azure Blob storage" is incorrect.

Reference:
To know more about processing Azure Stream Analytics, please visit the below-given link:

- https://docs.microsoft.com/en-us/learn/modules/introduction-to-data-streaming/4-process-events-azure-stream-analytics

Ask our Experts

View Queries

Question 51

Domain: Design and develop data processing

An Azure Data Factory pipeline needs to be scheduled in such a way that it executes with the deletion of a file in Azure Data Lake Storage Gen2 container. Which kind of trigger would you prefer?

- A. Schedule Trigger
- B. On-demand Trigger
- C. Event Triggerright
- D. Tumbling Window

Explanation:

Correct Answer: C
Event-driven architecture is a general data integration pattern that includes production, detection, consumption, and reaction to the events. Data integration scenarios generally need Data Factory consumers to trigger pipelines depending upon the events occurring in the storage account, for example, the deletion or arrival of any file in the Blob Storage account.

- **Option A is incorrect.** Schedule trigger is used to schedule a pipeline to run periodically i.e daily, hourly, etc.)
- **Option B is incorrect.** In the given scenario, an Event trigger, not an on-demand trigger, should be used.
- **Option C is correct.** Event trigger should be used to schedule the pipeline to execute with the deletion of the file.
- **Option D is incorrect.** A tumbling window is a particular type of trigger that fires at a periodic time interval from a particular start time while retaining state.

Reference:
To know more about creating event triggers, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/how-to-create-event-trigger

Ask our Experts

View Queries

Question 52

Domain: Design and implement data security

Static Data Masking and Dynamic Data Masking are two data masking options offered by Microsoft. Which of the following statements(s) are true about Static and Dynamic Data Masking. (Select all that are applicable)

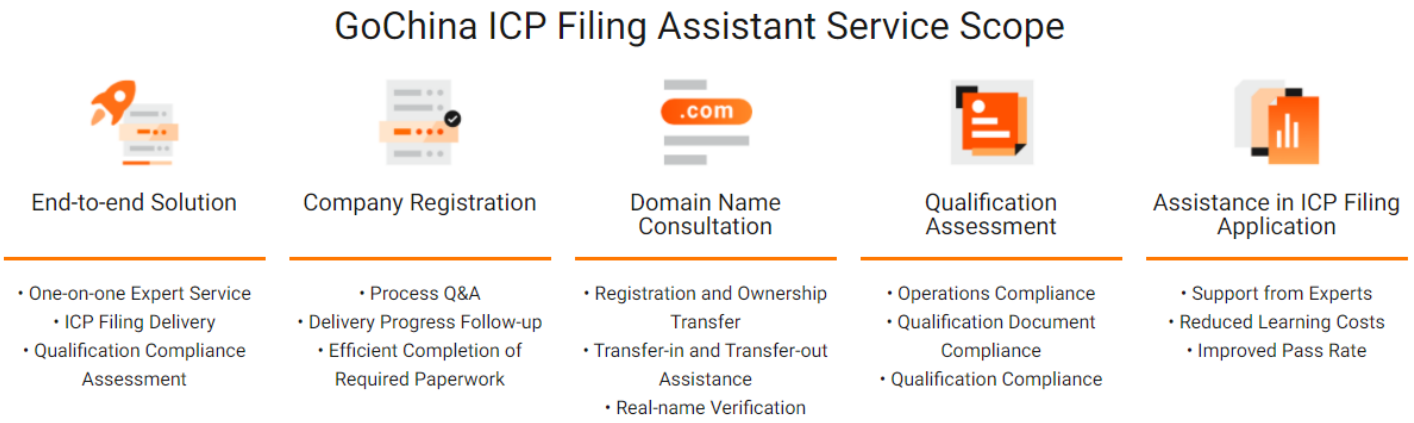
- A. Static data masking takes place on the original database whereas dynamic data masking takes place on a copy of the database.

- B. Dynamic data masking takes place on the original database whereas static data masking takes place on a copy of the database.right
- C. In Static Data Masking, the mask takes place at the storage level while in the case of dynamic data masking, the mask takes place on the fly at query time.right
- D. In Dynamic Data Masking, the mask takes place at the storage level while in the case of static data masking, the mask takes place on the fly at query time.

- E. In static as well as Dynamic Data Masking, all users have access to the same masked data.

Explanation:

Correct Answers: B and C
The below table highlights the differences between Static Data Masking and Dynamic Data Masking.



- **Option A is incorrect**. Dynamic data masking takes place on the original database whereas static data masking takes place on a copy of the database.
- **Option B is correct.** Dynamic data masking takes place on the original database whereas static data masking takes place on a copy of the database.
- **Option C is correct.** In Static Data Masking, the mask takes place at the storage level while in the case of dynamic data masking, the mask takes place on the fly at query time.
- **Option D is incorrect.** The given statement is not true.
- **Option E is incorrect.** Only in static data masking, all users have access to the same masked data. In Dynamic Data Masking, the mask varies depending upon the user's permission.

References:
To know more about static data masking and dynamic data masking, please visit the below-given links:

- https://azure.microsoft.com/en-in/blog/static-data-masking-preview/
- https://docs.microsoft.com/en-us/azure/azure-sql/database/dynamic-data-masking-overview

Ask our Experts

View Queries

Question 53

Domain: Design and implement data security

Creating an Azure Storage account does not automatically assign you the permissions to access data using Azure AD. An Azure role needs to be explicitly assigned to yourself for Azure Storage. At which of the following levels you can assign it?

- A. Subscription only
- B. Resource Group only
- C. Storage Account only
- D. Container only
- E. Any the aboveright

Explanation:

Correct Answer: E
You can assign the Azure role to yourself at the level of your subscription, storage account, resource group, or container.

- **Option A is incorrect.** An Azure role can be assigned at any level which includes your subscription, storage account, resource group, or container.
- **Option B is incorrect.** It is not true that you can assign an Azure role only on the Resource group level but any of your subscription, storage account, resource group, or container.
- **Option C is incorrect**. It is not true that you can assign Azure role only on storage account but any of your subscription, storage account, resource group, or container.
- **Option D is incorrect**. An azure role can be assigned at any level which includes your subscription, storage account, resource group, or container.
- **Option E is correct.** An azure role can be assigned at any level which includes your subscription, storage account, resource group, or container.

Reference:
To know more about assigning an Azure role, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/storage/blobs/assign-azure-role-data-access?tabs=portal

Ask our Experts

View Queries

Question 54

Domain: Monitor and optimize data storage and data processing

You are working as Data Administrator in the TDC company. You need to retrieve data from a Log Analytics workspace using log queries. In which of the following languages these log queries are written?

- A. PL/SQL
- B. SQLright
- C. Kusto Query Language (KQL)
- D. Transact – SQL

Explanation:

Correct Answer: C
To retrieve the data from a Log Analytics workspace, use a log query which is a read-only request for data processing. Kusto Query Language (KQL) is the query language that is used to write these log queries.

- **Option A is incorrect.** Log queries are written in KQL, not PL/SQL.
- **Option B is incorrect**. Log queries are written in KQL, not SQL.
- **Option C is correct.** Kusto Query Language (KQL) is the query language that is used to write the log queries.
- **Option D is incorrect.** Log queries are written in KQL, not Transact-SQL.

Reference:
To know more about Azure Monitor Logs, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/azure-monitor/logs/data-platform-logs

Ask our Experts

View Queries

Question 55

Domain: Monitor and optimize data storage and data processing

While working with pipelines in Azure Data Factory, you get an issue “Expression builder fails to load”. What might be the possible reason behind it? (Select the option that suits best)

- A. Chaining so many activities
- B. network or cache issues with the web browserright
- C. Not implementing time to live feature for Data Flow or optimized SHIR
- D. not scaling up SHIR according to your workload
- E. Files in a folder with different schema

Explanation:

Correct Answer: B
The expression builder can fail to load because of network or cache issues with the web browser. This problem can be resolved by upgrading the web browser to the latest updated version of the supported browser, clearing cookies for the site, and refreshing the page.

- **Option A is incorrect.** Chaining so many activities result in error “Code":"BadRequest","message":"ErrorCode=FlowRunSizeLimitExceeded.
- **Option B is correct.** The expression builder can fail to load because of network or cache issues with the web browser.
- **Option C is incorrect.** Not implementing time to live feature for Data Flow or optimized SHIR results in Longer startup times for activities in ADF Copy and Data Flow.
- **Option D is incorrect.** The given is the possible cause of Hitting capacity issues in SHIR.
- **Option E is incorrect.** It is the "DelimitedTextMoreColumnsThanDefined" error which is generally returned when the folder you are copying has filed with different schemas.

Reference:
To know more about troubleshooting pipeline orchestration and triggers in Azure Data Factory, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/pipeline-trigger-troubleshoot-guide

Practice Test 2

Question 1

Domain: Design and implement data storage

You are an Azure Data Engineer. To accomplish your task, you need to design your table service solution to be read efficient. Which of the following are the possible guidelines/ recommendations that you would follow to make your solution to be read efficient?

- A. Normalize the data as possible
- B. Don't create hot partitions
- C. Use compound key valuesright
- D. Use Query projectionright
- E. Specify either Rowkey or Partitionkey (not both) in the queries

Explanation:

Correct Answers: C and D
Here are some guidelines for designing table service solution to be read-efficient:

- Design for querying in read-heavy applications
- Specify both RowKey and PartitionKey in the queries
- Embrace storing duplicate copies for entities
- Embrace denormalizing your data
- Use compound key values
- Use query projection
- Option A is incorrect. Read efficient solution advocates denormalizing the data, not normalizing as table storage is a cheap solution.
- Option B is incorrect. Not creating hot partitions is a guideline to design your Table service solution to be write-efficient.
- Option C is correct. Using compound key value is a recommended guideline for being the table service solution read -efficient.
- Option D is correct. Using query projection is a recommended guideline for being the table service solution read -efficient. It enables reducing the amount of data that you transfer over the network with the help of queries selecting only the fields that are required.
- Option E is incorrect. The recommended guideline to be the table service solution read efficient is to specify both RowKey and PartitionKey in the queries.

Reference:
To know more about guidelines for table design, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/storage/tables/table-storage-design-guidelines

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View Queries

Question 2

Domain: Design and implement data storage

ADLS (Azure Data Lake Storage) Gen2 destination writes data depending upon the specified data format and makes a separate file for each partition. From the below given list, choose the format(s) that can't be used by ADLS Gen2 destination? (Select all the applicable options)

- A. Avro
- B. Delimited
- C. ORC
- D. XML
- E. None of theseright

Explanation:

Correct Answer: E
The destination can write using all the given data formats like Avro, Delimited, ORC, JSON, Text, Parquet, and XML.

- Option A is incorrect. An Avro file is written by destination for every partition. Also, Avro schema is included in every file.
- Option B is incorrect. For every partition, a delimited file is written by the destination.
- Option C is incorrect. For every partition, an ORC file is written by the destination.
- Option D is incorrect. For each partition, the destination writes an XML file.
- Option E is correct. The destination can write using all the given data formats (Avro, Delimited, ORC, and XML).

Reference:
To know various data formats used by ADLS Gen2 and their naming convention, please visit the below-given link:

- https://docs.streamsets.com/portal/#transformer/latest/help/transformer/Destinations/ADLS-G2-D.html

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Question 3

Domain: Design and implement data storage
There are a number of different options for data serving storage in Azure. These options vary based on the capability they offer. Which of the following data serving storage options in Azure does not provide SQL language support?

- A. Azure Synapse SQL pool
- B. Azure Synapse Spark pool
- C. Hive LLAP on HDInsight
- D. Cosmos DB
- E. Azure Analysis Servicesright

Explanation:

Correct Answer: E
Except Azure Analysis services, all data serving storage options like SQL Database, Azure Synapse Spark pool, Azure Synapse SQL pool, Azure Data Explorer, Azure Data Explorer, Hive LLAP on HDInsight, HBase/Phoenix on HDInsight, and Cosmos DB provide SQL language support.

- Option A is incorrect. Azure Synapse SQL pool supports SQL language.
- Option B is incorrect. Azure Synapse Spark pool supports SQL language.
- Option C is incorrect. Hive LLAP on HDInsight is one of the data serving storage options that supports SQL language.
- Option D is incorrect. Cosmos DB is one of the data serving storage options that supports SQL language.
- Option E is correct. Azure Analysis Services does not support SQL.

Reference:
To know more about analytical data store in Azure, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/analytical-data-stores

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Question 4

Domain: Design and implement data storage
There is an application that frequently needs to find all the orders delivered in a particular month. Which of the following sharding strategies would you implement to divide the data store to enable quick data retrieval?

- A. Lookup strategy

- B. Range strategyright
- C. Hash Strategy

- D. Normalized Strategy

Explanation:

Correct Answer: B
Range strategy results in grouping the related items together in the same shard, and ordering them by shard key. In the case of the application that frequently requires finding all orders delivered in a particular month, the data could be quickly retrieved/accessed if all orders associated with a month are stored in time and date order in the same shard.

- Option A is incorrect. Lookup strategy is not the best sharding strategy in the given scenario.
- Option B is correct. range strategy will put all the related orders (i.e. orders for a month) in the same shard which will result in quick data retrieval.
- Option C is incorrect. Hash strategy distributes the data across the shards to achieve a balance among the size of every shard and the average load to be encountered by each shard.
- Option D is incorrect. There is no such sharding strategy as a normalized strategy.

Reference:
To know more about sharding patterns, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/architecture/patterns/sharding#sharding-strategies

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Question 5

Domain: Design and implement data storage
You have an Azure SQL database. You have created two geometry instances and now you are interested in returning the point where these two geometry instances intersect? Which of the following methods will you use to achieve the goal?

- A. Intersection()

- B. GeoIntersection()

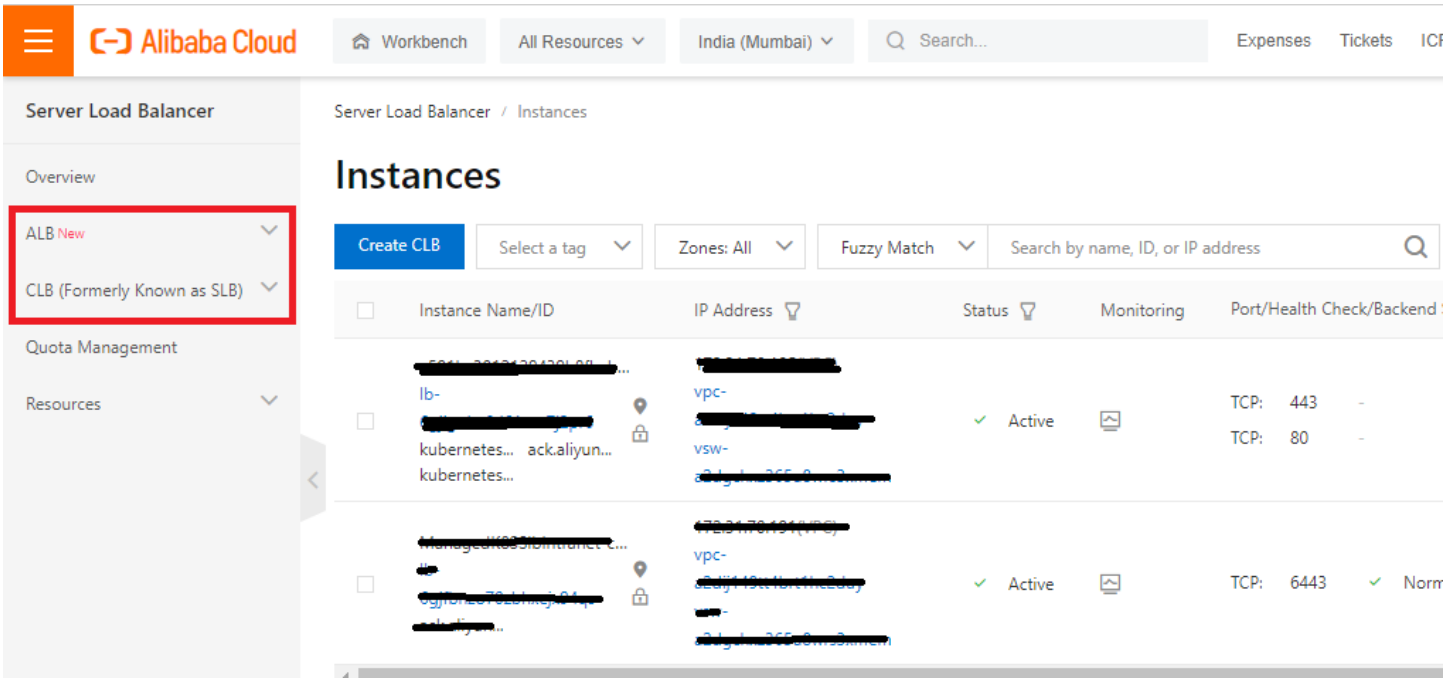
- C. STIntersection()right
- D. IntersectionPoint()

- E. None of these

Explanation:

Correct Answer: C
STIntersection() method is used to return the point where two geometry instances intersect each other.

Example:



- Option A is incorrect. Intersection is not the right function to return the point where two geometry instances intersect.
- Option B is incorrect. There is no function like GeoIntersection().
- Option C is correct. STIntersection() method is used to return the point where two geometry instances intersect each other.
- Option D is incorrect. IntersectionPoint() is not a valid function in Azure.
- Option E is incorrect. STIntersection() is the right choice.

Reference:
To know more about geometry types, please visit the below-given link:

- https://docs.microsoft.com/en-us/sql/t-sql/spatial-geometry/spatial-types-geometry-transact-sql?view=sql-server-ver15

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Question 6

Domain: Design and implement data storage
If you need to export the data, you can define an external table and export the data to it. Is it possible to override the properties of the external table using the export command?

- A. Yes

- B. Noright

Explanation:

Correct Answer: B
The export command references the external table by name. You can't override the external table properties with the help of the export command. For example, data in the Parquet form can't be exported to the external table having CSV data format as CSV.

Reference:
To know more about exporting data to an external table, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-explorer/kusto/management/data-export/export-data-to-an-external-table

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Question 7

Domain: Design and implement data storage
You need to create a quick object in a test environment and therefore you decide to create a temporal table with an "anonymous" history table. From the given below statement/remarks about the history table in this context, choose the statement(s) that is/are true.

- A. You need to manually create the anonymous history table and provide its specific schema.
- B. The history table is created as a rowstore table.right
- C. The history table is created as a columnstore table.

- D. A default clustered index is developed for the history tableright
- E. A history table is always uncompressed. No compression is ever applied on the history table.

Explanation:

Correct Answers: B and D
An anonymous history table is automatically built in the same schema as the temporal or current table. The history table is built as a rowstore table. If possible, page compression is applied on the history table otherwise the table remains uncompressed. For example, few table configurations, like SPARSE columns, don't allow compression.

- Option A is incorrect. An anonymous history table is automatically built in the same schema as the temporal or current table.
- Option B is correct. It is true that the history table is built as a rowstore table.
- Option C is incorrect. The history table is created as a rowstore table, not columnstore table.
- Option D is correct. A default clustered index is developed for the history table with an auto-generated name with the format *IX_<history_table_name>*. This index has the PERIOD columns (end, start).
- Option E is incorrect. It is not true that the history table always remains uncompressed. If possible, page compression is applied on the history table otherwise the table remains uncompressed. For example, few table configurations, like SPARSE columns, don't allow compression.

Reference:
To know more about creating a system-versioned temporal table, please visit the below-given link:

- https://docs.microsoft.com/en-us/sql/relational-databases/tables/creating-a-system-versioned-temporal-table?view=sql-server-ver15

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Question 8

Domain: Design and implement data storage
You are writing some data on Hadoop in the parquet format using spark. You need to enable compression. Which of the following is/are the valid compression type(s) that you can use for parquet format?

- A. none
- B. gzip
- C. snappy

- D. lzo

- E. All of theseright

Explanation:

Correct Answer: E
In Spark 2.1, the supported compression types of Parquet data types are: none, gzip, snappy and lzo. For Spark 2.4 / 3.0, the supported compression types are: uncompressed, none, snappy, lzo, gzip, brotli, lz4, and zstd.

- Option A is incorrect. none is not the only supported compression format. The complete Parquet dataset supports all given compression types.
- Option B is incorrect. gzip is not the only supported compression format. The complete Parquet dataset supports all given compression types.
- Option C is incorrect. snappy is not the only supported compression format. The complete Parquet dataset supports all given compression types.
- Option D is incorrect. lzo is not the only supported compression format. The complete Parquet dataset supports all given compression types.
- Option E is correct. The Parquet dataset supports all given compression types.

Reference:
To know more about parquet format in Azure Data Factory, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/format-parquet

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Question 9

Domain: Design and develop data processing
You are working in Azure Data Explorer Web UI. You want to enable Error level highlighting for interpreting the verbosity or severity level of every row in the result panel and have them coloured accordingly. To enable the error level highlighting, the column needs to be of one of some supported types. From the below-given list, choose the column types that are supported?

- A. Intright
- B. Double

- C. Longright
- D. Stringright

- E. Float
- F. Boolean
- G. Enum

Explanation:

Correct Answers: A, C and D
There are some specific column requirements for error level highlighting. For highlighted error levels, the column needs to be of type long, int, or string.

- If the column type is int or long:
    - The name of the column must be *Level*
    - It may only contain numbers between 1 and 5.
- If the column type is the string:
    - Having the name of the column *Level* is optional. It will help in improving the performance.
    - The column may have only the following values:
        - crit, critical, assert, fatal, high
        - error, e
        - warning, s
        - w, warning, monitor
        - information
        - verbose, verb, d
- Option A is correct. Int is a valid datatype for the column for error level highlighting.
- Option B is incorrect. Double is not a valid data type for the column for error level highlighting.
- Option C is correct. Long is a valid datatype for the column for error level highlighting.
- Option D is correct. String is a valid datatype for the column for error level highlighting.
- Option E is incorrect. Float is not a valid datatype for the column for error level highlighting.
- Option F is incorrect. Boolean is not a valid datatype for the column for error level highlighting.
- Option G is incorrect. Enum is not a valid datatype for the column for error level highlighting.

Reference:
To know more about how to Query data in Azure Data Explorer Web UI, visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-explorer/web-query-data

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Question 10

Domain: Design and develop data processing
There are a number of various analytical data stores that use different languages, models, and provide different capabilities. Which of the following is a low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data?

- A. Azure Synapse Analytics
- B. HBaseright
- C. Spark SQL
- D. Hive

- E. None of these

Explanation:

Correct Answer: B
HBase is a low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data. The primary data model used by HBase is the Wide column store.

- Option A is incorrect. Azure Synapse is a managed service depending upon the SQL Server database technologies and is optimized for supporting large-scale data warehousing workloads.
- Option B is correct. HBase is a low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data.
- Option C is incorrect. Spark SQL is an API developed on Spark that enables the creation of data frames and tables which are possible to be queried using SQL syntax.
- Option D is incorrect. It is HBase, not Hive that is a low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data.
- Option E is incorrect. HBase is the right answer.

Reference:
To know more about batch processing, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/architecture/data-guide/big-data/batch-processing

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Question 11

Domain: Design and develop data processing
The below given are the steps (not necessarily in the right sequence) to run the continuous integration & continuous delivery (CI/CD) pipeline (in a random sequence).

1. Choose Azure Repos Git as the location for source code.
2. Go to the Pipelines page. Then to create a new pipeline, select the action.
3. While setting up your pipeline, choose the Existing Azure Pipelines YAML file.
4. Choose your repository from the list of your repositories.
5. Run the pipeline.

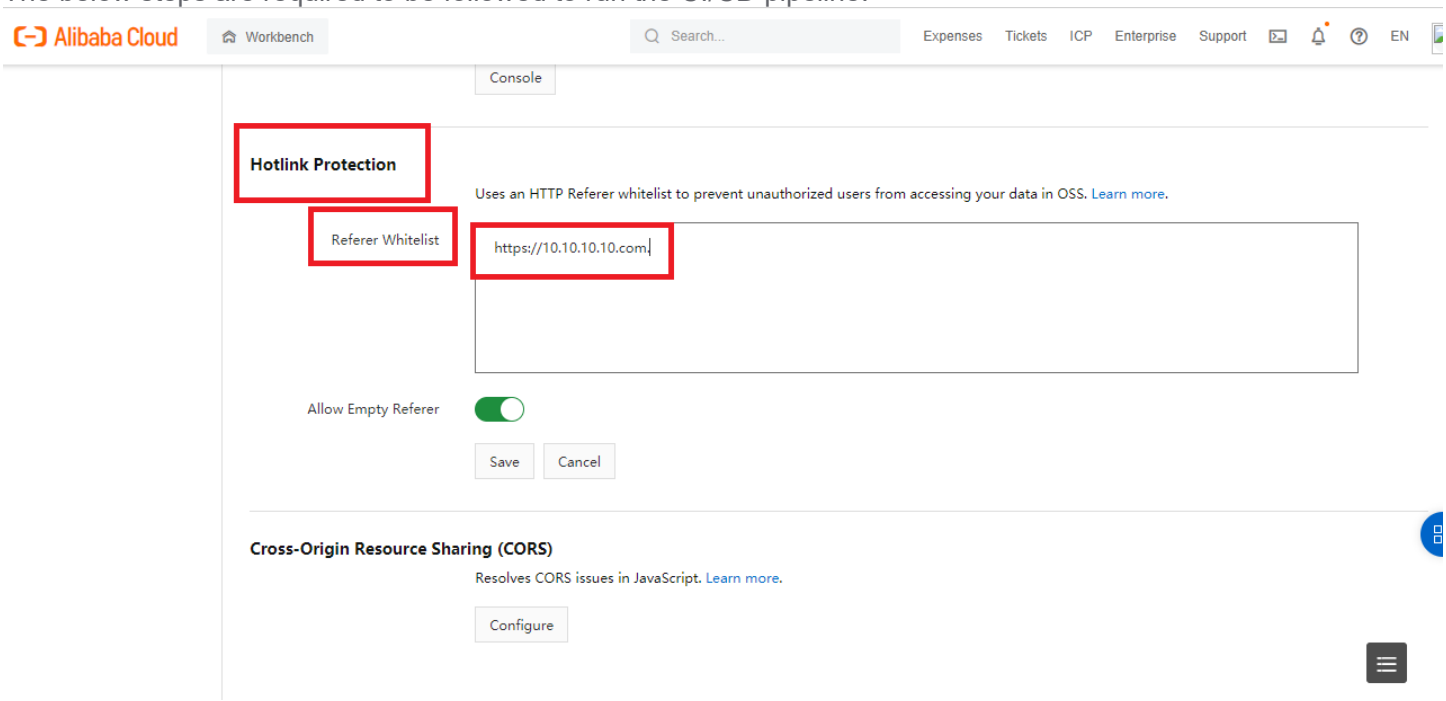
Choose the correct sequence of steps.

- A. a-b-c-d-e
- B. b-a-d-c-eright
- C. a-b-d-c-e
- D. a-b-c-e-d
- E. b-a-c-d-e

Explanation:

Correct Answer: B

The below steps are required to be followed to run the CI/CD pipeline:



- Option A is incorrect. As can be checked from the explanation, the option doesn't give the right sequence.
- Option B is correct. The given sequence is right to run CI/CD pipeline.
- Option C is incorrect. The given sequence is not correct.
- Option D is incorrect. The given sequence is not the right sequence to run CI/CD pipeline.
- Option E is incorrect. The given sequence is not correct.

Reference:

To know more about building a data pipeline, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/devops/pipelines/apps/cd/azure/build-data-pipeline?view=azure-devops

Ask our Experts

View Queries

Question 12

Domain: Design and develop data processing

Steve Warner's Car Dealership is an establishment in Wellington, New Zealand, which deals in purchasing and selling of cars and autos. Steve has hired you as a skilled consultant for Azure work and projects. You are chairing a team session and, in that session, you need to describe the Tumbling Window. Which of the following statements can you use to explain the Tumbling window?

- A. A window function that models scheduled overlapping windows, jumping forward in time by a fixed/defined period.
- B. A window function that segments a data stream into a contiguous series of fixed size, non-overlapping time segments and works against them. Events can't belong to more than 1 tumbling window.right
- C. A window function that generates events for specific times when the content of the window is really changed.

- D. A window function that clusters together events arriving at similar times, filtering out periods of time with no data.

- E. A windowing function that groups events by same timestamp values.

Explanation:

Correct Answer: B
A Tumbling window function segments a data stream into a contiguous series of fixed size, non-overlapping time segments and works against them. Events can't belong to more than 1 tumbling window.

- Option A is incorrect. It is the Hopping window function that models scheduled overlapping windows, jumping forward in time by a fixed/defined period.
- Option B is correct. A Tumbling window function segments a data stream into a contiguous series of fixed size, non-overlapping time segments and works against them. Events can't belong to more than 1 tumbling window.
- Option C is incorrect. It is the sliding window function that generates events for specific times when the content of the window is really changed.
- Option D is incorrect. A session window function clusters together events arriving at similar times, filtering out periods of time with no data.
- Option E is incorrect. A Snapshot window function groups events by the same timestamp values.

Reference:
To know more about Windowing functions, please visit the below-given link:

- https://docs.microsoft.com/en-us/learn/modules/ingest-data-streams-with-azure-stream-analytics/6-describe-windowing-functions

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Question 13

Domain: Design and develop data processing
Azure Stream Analytics allows using functions for scenarios like real-time scoring with machine learning models, complex mathematical calculations, string manipulations, encoding & decoding data. Which of the following function types are supported by Azure Stream Analytics?

- A. JavaScript user-defined functions

- B. JavaScript user-defined aggregates

- C. C# user defined functions (with Visual Studio)

- D. Azure Machine Learning

- E. All of theseright

Explanation:

Correct Answer: E
Azure Stream Analytics supports the below mentioned 4 function types:

- JavaScript user-defined functions
- JavaScript user-defined aggregates
- C# user defined functions (with Visual Studio)
- Azure Machine Learning

- Option A is incorrect. Azure Stream Analytics supports not only JavaScript user-defined functions but all the given function types.
- Option B is incorrect. Azure Stream Analytics supports not only JavaScript user-defined aggregates but all the given function types.
- Option C is incorrect. Azure Stream Analytics supports not only C# user defined functions (with Visual Studio) but all the given function types.
- Option D is incorrect. Azure Stream Analytics supports not only Azure Machine Learning but all the given function types.
- Option E is correct. All given function types are supported by Azure Stream Analytics.

Reference:
To know more about user-defined functions in Azure Stream Analytics, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/stream-analytics/functions-overview#exception-handling

Ask our Experts
View Queries

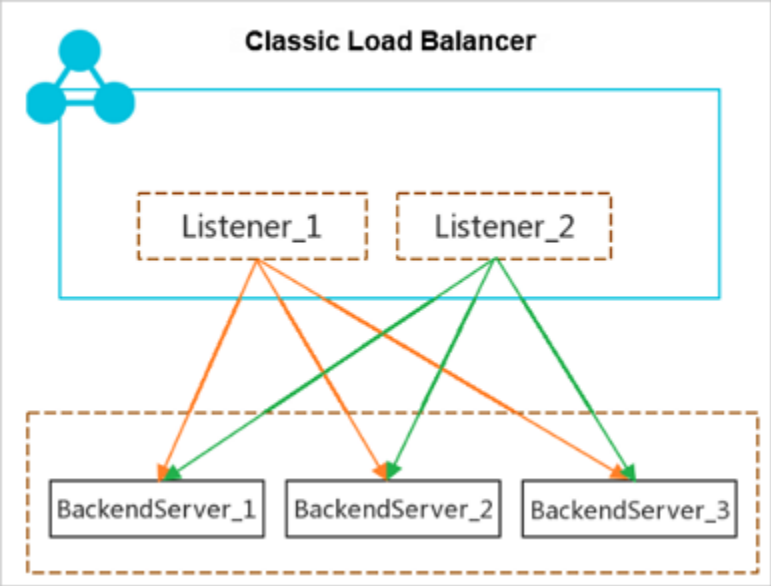
Question 14

Domain: Design and develop data processing
While running and managing your pipelines, you want to ensure that your pipelines don't run until an issue/error is fixed. Which of the following PowerShell cmdlet would you use to suspend/pause your pipelines?

- A. Pause- AzDataFactoryPipeline
- B. Stop- AzDataFactoryPipeline
- C. Resume- AzDataFactoryPipeline
- D. Skip- AzDataFactoryPipeline
- E. Suspend- AzDataFactoryPipelineright

Explanation:

Correct Answer: E
Pipelines can be paused/suspended using the PowerShell cmdlet **Suspend-AzDataFactoryPipeline**. This command helps a lot when you do not want to run the pipelines until an error/issue is resolved.
The syntax for the command is:



- Option A is incorrect. Pause- AzDataFactoryPipeline is not the right command to suspend/pause the pipeline.
- Option B is incorrect. Stop- AzDataFactoryPipeline is not the right command to suspend/pause the pipeline.
- Option C is incorrect. Resume- AzDataFactoryPipeline is used to resume the pause/suspended pipeline but is used to suspend/pause the pipeline.
- Option D is incorrect. There is no command like Skip- AzDataFactoryPipeline.
- Option E is correct. Suspend-AzDataFactoryPipeline is the right command to suspend/pause the pipelines.

Reference:
To know more about monitoring and managing pipelines, please visit the below-given link:

- https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/data-factory/v1/data-factory-monitor-manage-pipelines.md

Ask our Experts
View Queries

Question 15

Domain: Design and implement data security
You work as an expert consultant for Advanced Azure Learning where the IT team is working on an Azure SQL database titled AAL_Targets which has a table titledTargets_2021. In the table, there is a field Targets_ID having type varchar(22).

Required: The team is to implement masking for the Targets_ID field as given below:

• Setting the initial 3 prefix characters as "exposed"

• Setting the final 3 suffix characters as "exposed"

• Setting the rest of the characters as "masked"

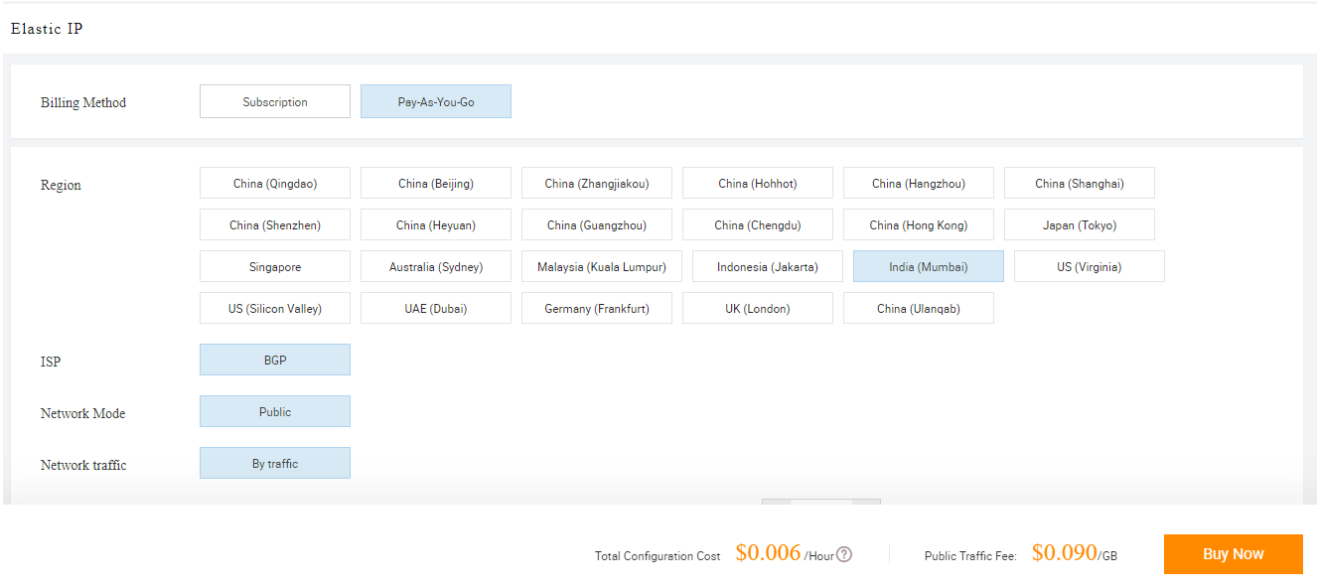
The IT team is planning to use data masking with a credit card function mask.

As an expert you need to tell if the given solution meets the requirements and achieves the goal.

- A. Yes
- B. Noright

Explanation:

Correct Answer: B
The below figure described the various masking functions with their masking logic:



As can be seen from the above image, utilizing data masking with a credit card function mask won't be successful. To accomplish the requirements, AAL needs to use Custom Text data masking, which will expose the first and last characters as mentioned and add a custom padding string in the middle.

Reference:
To know more about dynamic data masking, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/azure-sql/database/dynamic-data-masking-overview

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Question 16

Domain: Design and implement data security
You work in a company that provides financial services to its customers. The company wants to allow only its account managers to access the Social Service Number, Emails and other personal information. Which of the following types of security will suit best in this scenario?

- A. Row-level security
- B. Column-level securityright
- C. Table Level Security
- D. Dynamic Data Masking

Explanation:

Correct Answer: B

Column-level security allows restricting column access to protect the private or sensitive data. For instance, if you need to ensure that a particular user 'Smith' can only access specific columns of a table, column-level security helps here. Column-level security can be implemented with the GRANT T-SQL statement.

- Option A is incorrect. Row-level security can be applied on databases to allow fine-grained access over the rows in a table for restricted control upon who can access which type of data.
- Option B is correct. As we need to restrict column access and allow only the account managers to access the Social Service Number, Emails and other personal information, column-level security will work here.
- Option C is incorrect. Table Level Security is not the right option.
- Option D is incorrect. Dynamic data masking masks the data but here we need to restrict the column data access therefore column-level security is the right option.

Reference:
To know more about column level security, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/column-level-security

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View Queries

Question 17

Domain: Design and implement data security
While working in an Azure Databricks workspace, you need to filter depending upon the end of a column value utilizing the Column Class. You are specifically looking at a column titled name and filtered by the words ending with "ka".

Which command filters based on the end of a column value as required?

- A. df.filter("name like '_ka'")
- B. df.filter("name like '%ka'")
- C. df.filter(col("name").endswith("ka"))right
- D. df.filter( ).col("name").endwith("%ka")

Explanation:

Correct Answer: C
The Column Class supports both the endswith() method and the like() method to filter based on the end of a column value.

- Option A is incorrect. The given command won't help in filtering based on the end of a column value.
- Option B is incorrect. Column Class support is the function to filter based on the end of a column value. Therefore, the given option is not correct.
- Option C is correct. df.filter(col("name").endswith("ka")) is the right command to filter based on the end of a column value.
- Option D is incorrect. The Column Class supports endswith() method but the given is not the right syntax.

Reference:
To know more about Dataframes, visit the below-given link:

- https://docs.databricks.com/spark/latest/dataframes-datasets/introduction-to-dataframes-python.html

Ask our Experts
View Queries

Question 18

Domain: Monitor and optimize data storage and data processing
Activity log offers insight into the operations/activities on every Azure resource in the subscription from the outside (*the management plane*) in addition to the updates on Service Health events. At which of the following layers, Activity Log is available?

- A. Azure Resources
- B. Azure Subscriptionright
- C. Azure Tenant
- D. None of the above

Explanation:

Correct Answer: B
Activity Log is present on the Azure Subscription layer. Activity log offers insight into the operations/activities on every Azure resource in the subscription from the outside i.e *the management plane*, in addition to the updates on Service

Health events. Activity Log can be used to know who, *what*, *when and who* for any write operations (DELETE, POST, PUT) performed on the resources in your Azure subscription.

- Option A is incorrect. These are the Resource Logs that are available at Azure Resources layer.
- Option B is correct. Activity Log is present on the Azure Subscription layer.
- Option C is incorrect. Azure Active Directory logs are available at the Azure Tenant layer.
- Option D is incorrect. Activity Log is present on the Azure Subscription layer.

Reference:

To know more about Azure platform logs, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/platform-logs-overview

Ask our Experts

View Queries

Question 19

Domain: Monitor and optimize data storage and data processing

You work in an Azure Transformational Logics (ATL) company and you have been given the responsibility to create and update query-optimization statistics utilizing the Synapse SQL resources in a dedicated SQL pool. The following are the guiding principles recommended for updating the statistics during the load process. Which of the following is/are not true?

- A. Ensure that every loaded table is having at least 1 statistics object updated.
- B. Focus on the columns participating in ORDER BY, GROUP BY, JOIN and DISTINCT clauses.
- C. Update "ascending key" columns like order dates more frequently as these values are not considered/included in the statistics histogram.
- D. Update static distribution columns more frequently.right
- E. None of these

Explanation:

Correct Answer: D
The below-given guiding principles are recommended to update the statistics during the load process:

- Option A is incorrect. It is true that you should ensure that every loaded table is having at least 1 statistics object updated.
- Option B is incorrect. The given one is also a guiding principle to update the statistics during the load process.
- Option C is incorrect. The given one is also a guiding principle to update the statistics during the load process.
- Option D is correct. Rather than more frequently, you need to update static distribution columns less frequently.
- Option E is incorrect. Option D describes the wrong principle.

Reference:
To know more about Statistics in Synapse SQL, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-statistics#update-statistics

Ask our Experts
View Queries

Question 20

Domain: Monitor and optimize data storage and data processing
While working on a project, you notice that your Apache Spark Job is underperforming. Which of the following can be a possible reason for a slower performance on such join or shuffle jobs?

- A. Bucketing
- B. Using the Cache Option
- C. Data Skewright
- D. Enabling Autoscaling
- E. None of these

Explanation:

Correct Answer: C

The data skew can be the most common reason for the slower performance of your join or shuffle jobs because of existing asymmetry in your job data.

Being a distributed system in Spark, Data is divided into several pieces, known as partitions, moved into the diverse cluster nodes, and processed in parallel. If a partition gets much larger than the other, the node processing it is likely to face resource issues and slow down the whole execution. This type of data imbalance is known as data skew.

- Option A is incorrect. Bucketing does not result in the slow performance of join or shuffle jobs.
- Option B is incorrect. Using the Cache option is likely to increase, not decrease the performance.
- Option C is correct. The data skew is the most common reason for the slower performance of your join or shuffle jobs.
- Option D is incorrect. Enabling Auto scaling can't be the possible cause of slow performance on Join or Shuffle jobs.
- Option E is incorrect. Option C Data Skew is the correct choice.

Reference:
To know more about data-skew and how to resolve data skew problems, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-lake-analytics/data-lake-analytics-data-lake-tools-data-skew-solutions

Ask our Experts
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Question 21

Domain: Design and implement data storage
Fill in the blanks in the context of Microsoft Azure.

…… data is generally stored in a relational database like SQL Server or Azure SQL Database.

- A. Structuredright
- B. Unstructured
- C. Semi-structured
- D. JSON format
- E. ORC format

Explanation:

Correct Answer: A

Based on the type of data such as unstructured, semi-structured, or structured, data is stored differently. Structured data is generally stored in a relational database like SQL Server or Azure SQL Database.

- Option A is correct. Relational databases like SQL Server or Azure SQL Database store structured data.
- Option B is incorrect. Unstructured data is generally stored in NoSQL databases.
- Option C is incorrect. Relational databases like SQL Server or Azure SQL Database store structured data.
- Option D is incorrect. JSON format is not the right answer.
- Option E is incorrect. Structured data is the correct answer.

Reference:
To know more about understanding Data Storage Model, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/data-store-overview

Ask our Experts
View Queries

Question 22

Domain: Design and implement data storage
You need to determine the type of Azure service required to fit the following requirements and specifications:

Data classification: Unstructured

Operations:

• retrieve only by ID

• Customers need a high number of read operations with low latency

• updates and creates will be somewhat infrequent operations and can have higher latency as compared to read operations

Latency & throughput: Retrievals need to have high throughput and low latency. Updates and creates can have higher latency as compared to read operations.

Transactional support: Not needed

- A. Azure Cosmos DB
- B. Azure Route Table
- C. Azure SQL Database
- D. Azure Blob Storageright
- E. Azure Queue Storage

Explanation:

Correct Answer: D
Azure Blob storage allows storing the files like videos and photos. It works in collaboration with Azure Content Delivery Network (CDN) by caching the content that is used more frequently and storing this content on edge servers. It decreases latency in providing those images to the users.

Azure Blob storage also allows moving images from the hot storage tier to the archive or cool storage tier, to decrease the costs and increase throughput on the most frequently retrieved or viewed photos and videos.

- Option A is incorrect. Using Azure cosmos DB won't meet the requirements.
- Option B is incorrect. Using Azure Route Table is not the right option.
- Option C is incorrect. Azure SQL Database stores the structured data.
- Option D is correct. Azure Blob Storage is the right choice.
- Option E is incorrect. Azure Queue Storage is not the right choice as per the requirements.

References:
To more about Azure blob storage, please visit the below given links:

- https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction
- https://docs.microsoft.com/en-us/azure/storage/common/storage-introduction#example-scenarios

Ask our Experts
View Queries

Question 23

Domain: Design and implement data storage
Being the expert consultant, you are chairing a team session in which you need to describe Azure Data Factory (ADF). Which of the following statements would you use to describe the Azure Data Factory?

- A. A storage that can store data in a highly compressed and in-memory cache for optimized query performance
- B. Low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data
- C. A managed service depending upon the SQL Server database technologies and is optimized for supporting the large-scale data warehousing workloads
- D. An ELT tool to orchestrate data from various sources to the targetright

Explanation:

Correct Answer: D

Azure Data Factory is an ELT (Extract, Transfer, and Load Data) tool to orchestrate data coming from different sources to the destination (target). ADF allows us to extract data from various sources and targets like Azure Data Warehouse, SQL Server, etc.

- Option A is incorrect. These are Azure Analysis Services tabular models that can store data in a highly compressed and in-memory cache for optimized query performance.
- Option B is incorrect. HBase is a low-latency NoSQL data store that provides a high-performance and flexible option to query structured and semi-structured data.
- Option C is incorrect. Azure Synapse is a managed service depending upon the SQL Server database technologies and is optimized for supporting large-scale data warehousing workloads.
- Option D is correct. Azure Data Factory is an ELT tool to orchestrate data from various sources to the target.

Reference:
To know more about Azure Data Factory, please visit the below-given link:

- https://visualbi.com/blogs/microsoft/azure/file-partition-using-azure-data-factory/

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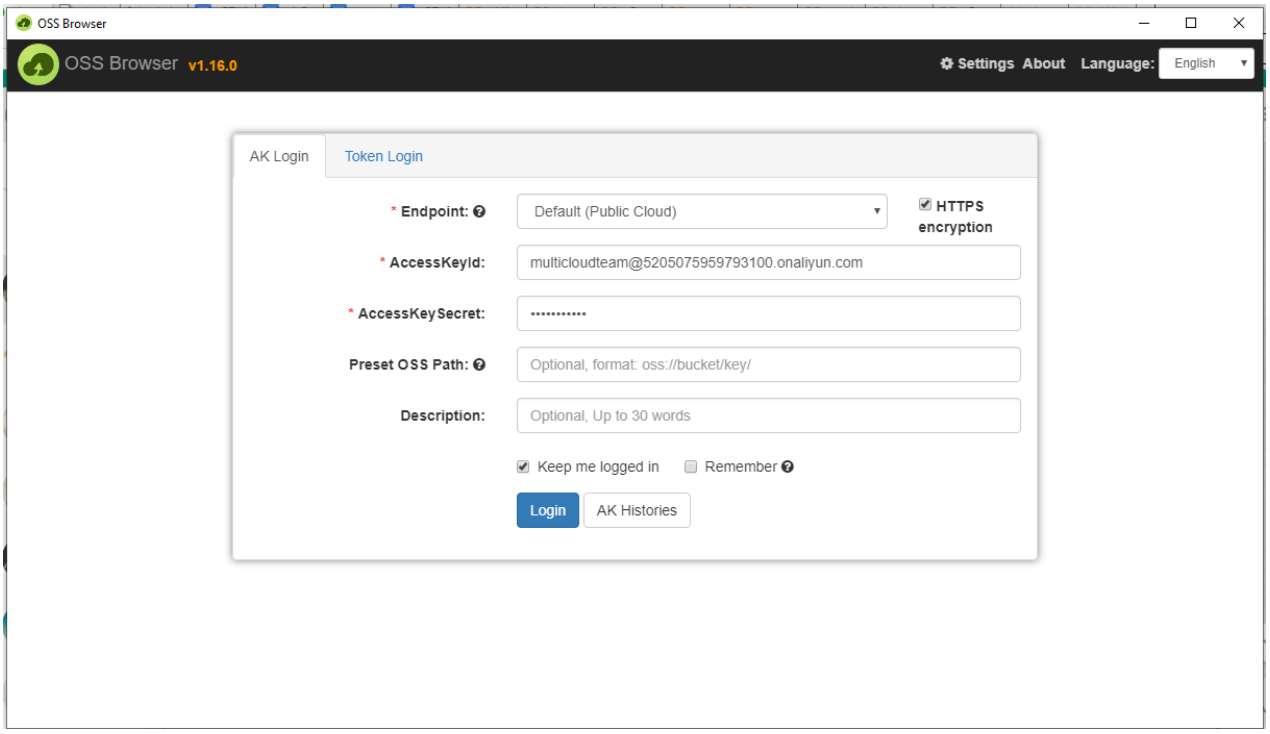
Question 24

Domain: Design and implement data storage
There are a number of different options for data serving storage in Azure. These options vary based on the capability they offer. Which of the below-given options don't offer Row-Level security? (Select two options)

- A. SQL Database
- B. Azure Data Explorerright
- C. HBase/Phoenix on HDInsight
- D. Hive LLAP on HDInsight
- E. Azure Analysis Services
- F. Cosmos DBright

Explanation:

Correct Answers: B and F
The below table mentions the various security capabilities offered by different data serving storage options.



- Option A is incorrect. SQL Database offers Row-level security.
- Option B is correct. Azure Data Explorer doesn't provide Row-level security.
- Option C is incorrect. HBase/Phoenix on HDInsight offers Row-level security with domain-joined HDInsight clusters.
- Option D is incorrect. Hive LLAP on HDInsight offers Row level security with domain-joined HDInsight clusters.
- Option E is incorrect. Azure Analysis Services offers Row-level security.
- Option F is correct. Cosmos DB doesn't provide Row-level security.

Reference:

To know more about analytical data stores in Azure, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/analytical-data-stores

Ask our Experts

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Question 25

Domain: Design and implement data storage

You need a NoSQL database of a supported API model, with low latency performance and at planet scale.

Which of the following would you use?

- A. Azure SQL Database
- B. Azure Cosmos DBright
- C. Azure DB Server
- D. Azure Database for PostgreSQL
- E. Azure Database for MYSQL

Explanation:

Correct Answer: B

Use Azure Cosmos DB when you need a NoSQL database of the supported API model, at planet scale, and with low latency performance. Nowadays, Cosmos Databases support five-nines uptime (99.999 percent). It is likely to support response times below 10 ms when it is provisioned correctly.

- Option A is incorrect. The requirements demand a NoSQL database.
- Option B is correct. Using Azure Cosmos DB is the right choice.
- Option C is incorrect. Azure DB server is not the right choice.
- Option D is incorrect. The requirements ask for a NoSQL database of a supported API model, with low latency performance and at planet scale which is Azure cosmos Database.

Option E is incorrect. The Question asks for a NoSQL Database.

Reference:
To know more about Azure Cosmos DB, please visit the below-given link:

- https://azure.microsoft.com/en-us/services/cosmos-db/

Ask our Experts
View Queries

Question 26

Domain: Design and implement data storage
You are writing a PowerShell script to copy an archive blob to a new blob within the same storage account. In the script, you need to initialize some variables. From the below options, choose the variables that must be initialized with your blob names. (Choose all that are applicable)

- A. $accountName
- B. $rgName
- C. $srcBlobNameright
- D. $destBlobNameright
- E. $newBlobName
- F. $achiveBlobName
- G. $srcdestBlob

Explanation:

Correct Answers: C and D
You can use a PowerShell Script to copy an archive blob to a new blob within the same storage account. As can be seen from the given diagram, you need to initialize a number of variables with your resource group, container, storage account and blob names. Here you must initialize the following variables with the corresponding names:

Variable	Name used to initialize the variables
$rgName	Your resource group name.
$accountName	Your storage account name
$srcContainerName and $destContainerName	Your container name
$srcBlobName and $destBlobName	Your Blob Names

- Option A is incorrect. $accountName variable is initialized with your storage account name.
- Option B is incorrect. $rgName variable is initialized with resource group name.
- Option C is correct. $srcContainerName and $destContainerName variables are needed to be initialized with the blob names.
- Option D is correct. $srcContainerName and $destContainerName variables are needed to be initialized with the blob names.
- Option E is incorrect. There is no need to use or initialize $newBlobName to copy an archive blob to a new blob.
- Option F is incorrect. There is no need to use or initialize $archieveBlobName to copy an archive blob to a new blob.
- Option G is incorrect. There is no need to use or initialize $srcdestBlob to copy an archive blob to a new blob.

Reference:
To know more about Rehydrating blob data from the archive tier, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-rehydration?tabs=azure-portal

Ask our Experts: View Queries

Question 27

Domain: Design and implement data storage
You need to export the data and for that purpose, you decide to define an external table. Choose the formats from the below-given options that can be used for the external tables in export scenarios? (Choose all that all applicable)

- A. CSVright
- B. XML
- C. ORC
- D. TSVright
- E. Delimited
- F. JSONright
- G. Parquetright
- H. AVRO

Explanation:

Correct Answers: A, D, F and G
Utilizing external table in export scenarios is limited only to the four formats: CSV, JSON ,TSV, and Parquet.

- Option A is correct. CSV is one of the 4 formats that is valid for the export tables in export scenarios.
- Option B is incorrect. XML is not a valid format.
- Option C is incorrect. ORC is not a valid format.
- Option D is correct. TSV is a valid format for the export tables in export scenarios.
- Option E is incorrect. Delimited is not a valid format.
- Option F is correct. JSON is a valid format for the export tables in export scenarios.
- Option G is correct. Parquet is a valid format for the export tables in export scenarios.
- Option H is incorrect. Avro is not a valid format.

Reference:

To know more about the external tables, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-explorer/kusto/management/external-tables-azurestorage-azuredatalake

Ask our Experts

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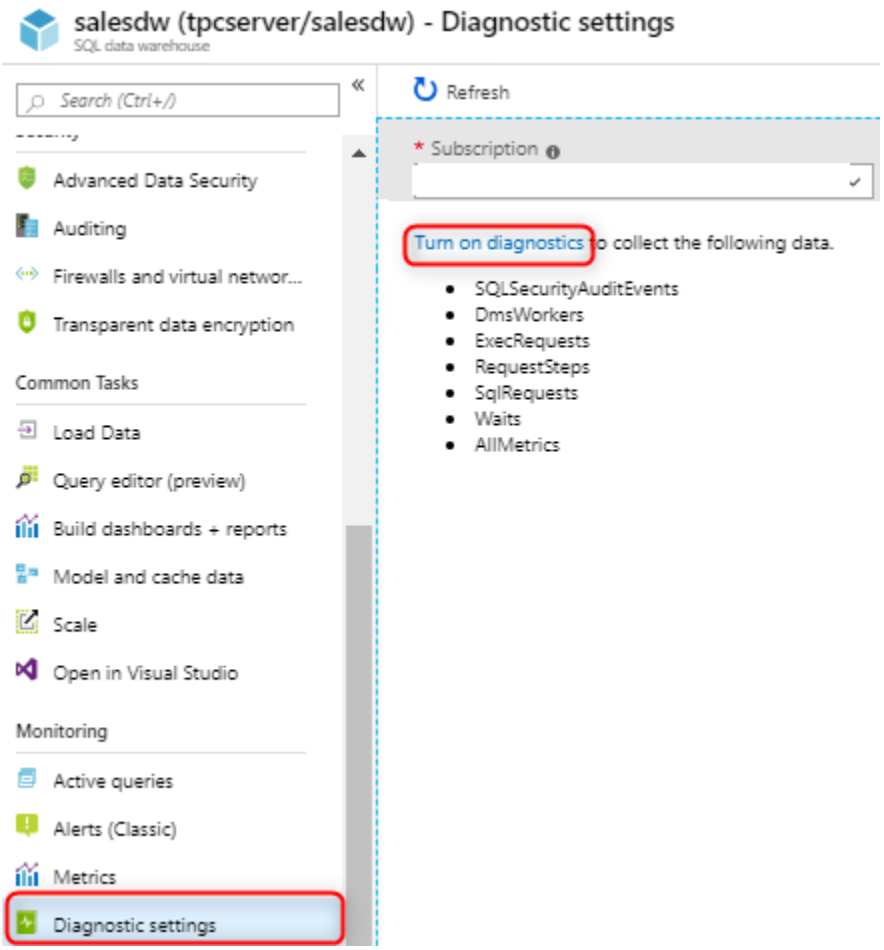
Question 28

Domain: Design and implement data storage

Advanced Insight Mechanics (AIM) has hired you as an expert consultant. You have called a meeting with the IT Team where you are discussing Azure Synapse. AIM has a Synapse workspace titled aimWorkspace that has an Apache Spark DB titled aimtestdb.

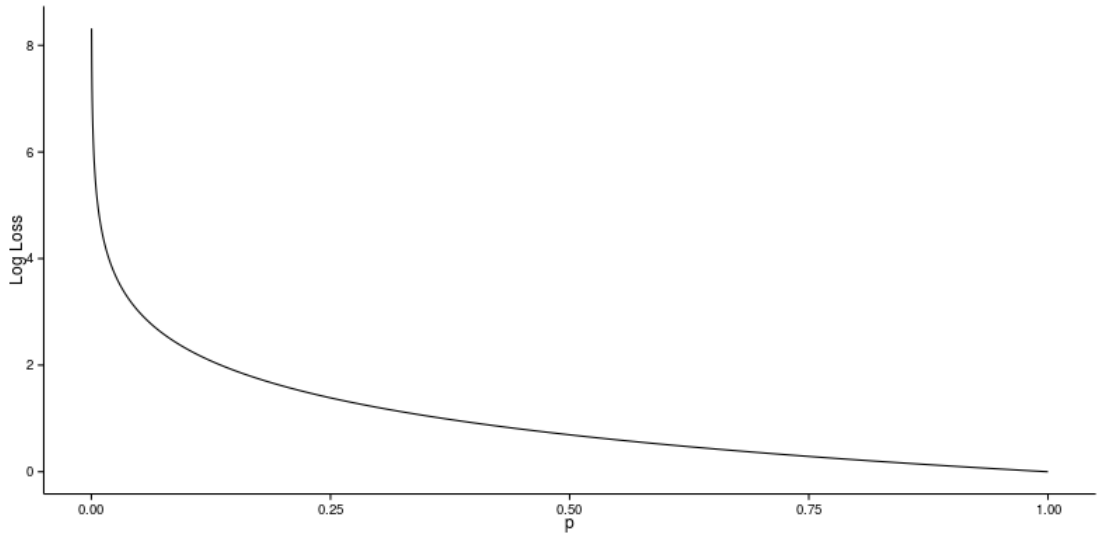
The senior developer of the team runs the below given query in Spark pool in aimWorkspace.



Using Parquet, the senior developer then employs Spark for inserting the below given row in aimtestdb.aimParquetTable. The row has the below-mentioned data:

EmployeeName	EmployeeID	EmployeeStartDate
Steve Warner	1234	2019-03-21

After 5 minutes, the senior developer executes the below given statement through a serverless SQL pool into aimWorkspace.



What will the query return?

- A. Null
- B. Steve Warner
- C. 1234
- D. 2019-03-21
- E. An errorright

Explanation:

Correct Answer: E
The given query will return an error as the query mentions a column 'name' in the WHERE clause. There is no such column in the actual table.

The actual query should be written as:

```
SELECT EmployeeID -

FROM aimtestdb.dbo.aimParquetTable

WHERE employeename = 'Steve Warner;
```

- Option A is incorrect. The query uses the column that actually does not exist in the table. So, it will return an error.
- Option B is incorrect. The query won't return Steve Warner.
- Option C is incorrect. The query won't return 1234.
- Option D is incorrect. The query won't return 2019-03-2021.
- Option E is correct. The query uses the column that actually does not exist in the table. So, it will return an error.

Reference:
To know more about Azure Synapse Analytics shared metadata tables, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/metadata/table

Ask our Experts
View Queries

Question 29

Domain: Design and develop data processing

You have created a VIEW within SQLite. From the given below options, choose the operation(s)/statement(s) that is/are possible to apply on view. (Choose all applicable)

- A. Readright
- B. Insert
- C. Delete
- D. Update
- E. All of the above

Explanation:

Correct Answer: A

The VIEWS you create within SQLite are read-only. It is not possible to execute INSERT, DELETE, or UPDATE statements on a view.

- Option A is correct. After a view is created in SQLite, only Read operation can be performed on it.
- Option B is incorrect. It is not possible to execute INSERT, DELETE, or UPDATE statements on a view in SQLite.
- Option C is incorrect. It is not possible to execute INSERT, DELETE, or UPDATE statements on a view in SQLite.
- Option D is incorrect. It is not possible to execute INSERT, DELETE, or UPDATE statements on a view in SQLite.
- Option E is incorrect. After a view is created in SQLite, it becomes Read-only. INSERT, DELETE, or UPDATE statements can't be performed on a view in SQLite.

Reference:

To know more about how to apply SQL Transformation, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/machine-learning/algorithm-module-reference/apply-sql-transformation

Ask our Experts

View Queries

Question 30

Domain: Design and develop data processing

There are a number of different technology choices for batch processing. These choices vary based on the capability they offer. Which of the following provide the facility of dynamic data masking? (Select all that are applicable)

- A. Azure Data Lake Analytics
- B. Azure Synapseright
- C. HDInsightright
- D. Azure Databricks
- E. Azure Data Factory

Explanation:

Correct Answers: B and C

Azure Synapse offers Dynamic Data Masking. HDInsight (with Hive and Hive LLAP) provides the dynamic data masking facility. Azure Databricks does not offer dynamic data masking facility.

- Option A is incorrect. Azure Data Lake Analytics does not offer dynamic data masking.
- Option B is correct. Azure Synapse offers dynamic data masking.
- Option C is correct. HDInsight(with Hive and Hive LLAP) provides the dynamic data masking facility.
- Option D is incorrect. Azure Databricks does not offer dynamic data masking.
- Option E is incorrect. Azure Synapse and HDInsight are the correct answers.

Reference:

To know more about batch processing, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/batch-processing

Ask our Experts

View Queries

Question 31

Domain: Design and develop data processing

When you implement the Clean Missing Data module to a set of data, the Minimum missing value ratio and Maximum missing value ratio are two important factors in replacing the missing values. If the Maximum missing value is set to 1, what does it mean? [select the one that suits best]

- A. missing values are cleaned only when 100% of the values in the column are missing.
- B. missing values are cleaned even if there is only one missing value.
- C. missing values are cleaned only when there is only one missing value.
- D. missing values won't be cleaned.
- E. missing values are cleaned even if 100% of the values in the column are missing.right

Explanation:

Correct Answer: E

Maximum missing value ratio is specified as the maximum number of missing values that can be present for the operation that is to be executed. By default, the Maximum missing value ratio is set to 1 which indicates that missing values will be cleaned even if 100% of the values in the column are missing.

- Option A is incorrect. The use of the word "Only When" does not rightly state the meaning.
- Option B is incorrect. Setting Minimum missing value ratio property to 0 actually means that missing values are cleaned even if there is only one missing value.
- Option C is incorrect. Minimum and Maximum missing value ratios talk only about minimum and maximum ratios, not a specific number.
- Option D is incorrect. The given statement is not right.
- Option E is correct. Setting the Maximum missing value ratio to 1 indicates that missing values will be cleaned even if 100% of the values in the column are missing.

Reference:

To know more about the clean missing Data Module, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/machine-learning/algorithm-module-reference/clean-missing-data

Ask our Experts

View Queries

Question 32

Domain: Design and develop data processing

You are the team leader and while working on the project, one of your team members is confused about which command to invoke to view the list of active streams? What will you advise him?

- A. spark.view.active
- B. spark.view.activeStreams
- C. spark.streams.show
- D. spark.streams.activeright

Explanation:

Correct Answer: D

Invoke the command spark.streams.active to see the list of active streams.

- Option A is incorrect. spark.view.active is not the right command.
- Option B is incorrect. spark.view.activeStreams is not a valid command.
- Option C is incorrect. Invoking spark.streams.show won't help in getting the list of active streams.
- Option D is correct. spark.streams.active should be invoked to see the list of active streams.

Reference:

To know more about structured streaming programming, please visit the below-given link:

- https://spark.apache.org/docs/latest/structured-streaming-programming-guide.html

Ask our Experts

View Queries

Question 33

Domain: Design and develop data processing

You are leading an IT team in Azure company and a new member joined the team. He reviews the options for an input to an Azure Stream Analytics job that your IT team is working on (which requires high throughput and low latency). He seems confused about input he should use and therefore asks you “Which Azure product should I plan to use for the job's input?”

What would be your answer?

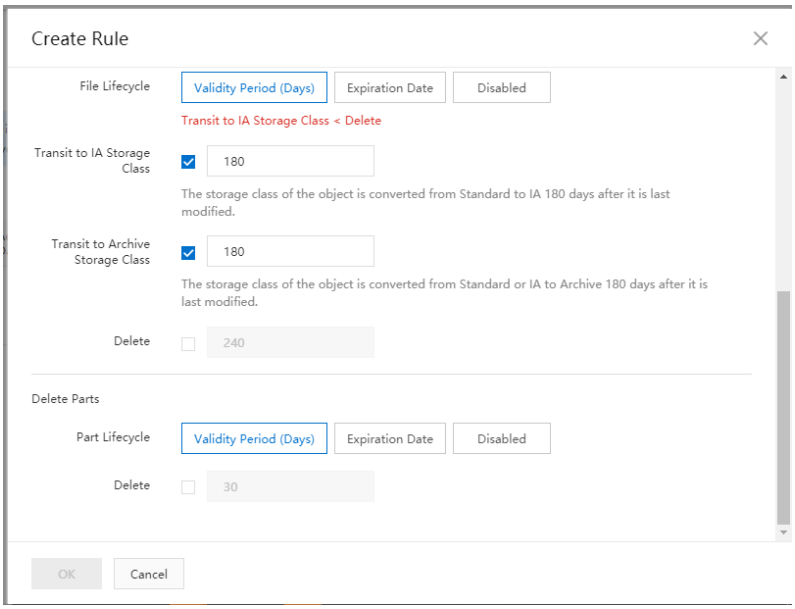
- A. Azure Table Storage
- B. Azure Blob Storage
- C. Azure Event Hubsright
- D. Azure Data Lake Storage
- E. Azure Queue Storage

Explanation:

Correct Answer: C

Azure Event Hubs are the Azure product that consumes data streams from applications at high throughput and low latency.

The following diagram demonstrates how data is sent to Azure Stream Analytics, analyzed, and sent for further actions like presentation or storage.



- Option A is incorrect. Using Azure Table storage for job’s input is not the right option.
- Option B is incorrect. Azure Blob Storage is not a recommended choice for high throughput and low latencies. Azure event hub is a better choice.
- Option C is correct. Azure Event Hubs are the Azure product that consumes data streams from applications at high throughput and low latency.
- Option D is incorrect. Using Azure Data Lake storage for job’s input is not the right option.
- Option E is incorrect. Using Azure Queue storage for job’s input is not the right option.

Reference:

To know more about Azure Event hubs, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-about
- https://docs.microsoft.com/en-us/azure/stream-analytics/stream-analytics-introduction

Ask our Experts View Queries

Question 34

Domain: Design and develop data processing

Which of the following windowing features would you use to output the events only when the content of the window really changed in Stream Analytics jobs?

- A. Tumbling Window
- B. Topping Window
- C. Sliding Windowright
- D. Session Window
- E. Snapshot Window

Explanation:

Correct Answer: C

It is the sliding window that outputs the events only when the content of the window really changed in Stream Analytics jobs.

- Option A is incorrect. A Tumbling window function segments a data stream into a contiguous series of fixed size, non-overlapping time segments and works against them.
- Option B is incorrect. There is no windowing function like Topping Window.
- Option C is correct. The sliding window function is used to output the events only when the content of the window really changed in Stream Analytics jobs.
- Option D is incorrect. Session window function groups events arriving at similar times, filtering out points/periods of time where there exists no data.
- Option E is incorrect. The snapshot window function is used to group the events having the same timestamp.

Reference:

To know more about Windowing functions, please visit the below-given link:

- https://docs.microsoft.com/en-us/learn/modules/ingest-data-streams-with-azure-stream-analytics/6-describe-windowing-functions

Ask our Experts

View Queries

Question 35

Domain: Design and develop data processing

On each file upload, Batch writes 2 log files to the compute node. These log files can be examined to know more about a specific failure. These two files are:

- A. fileuploadin.txt and fileuploaderr.txt
- B. fileuploadout.txt and fileuploadin.txt
- C. fileuploadout.txt and fileuploaderr.txtright
- D. fileuploadout.JSON and fileuploaderr.JSON
- E. fileupload.txt and fileuploadout.txt

Explanation:

Correct Answer: C
When you upload a file, 2 log files are written by Batch to the compute node, named - fileuploadout.txt and fileuploaderr.txt. These log files help to get information about a specific failure. The scenarios where file upload is not done, these fileuploadout.txt and fileuploaderr.txt log files don't exist.

- Option A is incorrect. fileuploadin.txt and fileuploaderr.txt are not the right files.
- Option B is incorrect. fileuploadout.txt and fileuploadin.txt are not the right log files.
- Option C is correct. On each file upload, Batch writes 2 log files to the compute node. These files are fileuploadout.txt and fileuploaderr.txt.
- Option D is incorrect. fileuploadout.JSON and fileuploaderr.JSON are not the right log files.
- Option E is incorrect. fileupload.txt and fileuploadout.txt are not the right files.

Reference:
To know more about job and task error checking, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/batch/batch-job-task-error-checking

Ask our Experts
View Queries

Question 36
Domain: Design and implement data security

You are working on a project for a healthcare provider that provides health care services to the customers. The healthcare provider wants that only nurses and doctors must be able to access medical records. It should not be visible to the billing department. Which of the following types of security would you implement in this scenario?

- A. Column-level securityright
- B. Row-level security
- C. Dynamic Data Masking
- D. Table Level Security

Explanation:

Correct Answer: A
Column level security is used to restrict the column access to protect the sensitive data. If you want that only some specific person or department should be able to view some data, column-level security works the best.

- Option A is correct. As we want only nurses and doctors to be able to access medical records and records should not be visible to the billing department, column-level security will do the required.
- Option B is incorrect. Row-level security is the feature that can be applied on databases to enable fine-grained access over rows in a database table for restricted control upon who can access which type of data.
- Option D is incorrect. Dynamic data masking won't help in restricting the column access only to some specific persons.
- Option D is incorrect. Table Level Security is not a good choice.

References:
To know more about column level security, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/column-level-security
- https://azure.microsoft.com/en-us/blog/column-level-security-is-now-supported-in-azure-sql-data-warehouse/

Ask our Experts
View Queries

Question 37
Domain: Design and implement data security

Azure role-based access control (RBAC) is the authorization technique that can be used for managing access to Azure resources. From the below-given list, select four top-level classifications to which you can assign roles to grant access.

- A. Managed Identitiesright
- B. Assets
- C. Devices
- D. Attributes
- E. Usersright
- F. Groupsright
- G. Service Principalsright
- H. Workflows
- I. Orchestrations

Explanation:

Correct Answers: A, E, F and G
RBAC is the authorization technique that is used for managing access to Azure resources. To grant access, roles can be assigned to groups, service principals, users, or managed identities at a particular scope.

- Option A is correct. A Role can be assigned to Managed Identities.
- Option B is incorrect. Role can't be assigned to Assets.
- Option C is incorrect. Role can't be assigned to devices.
- Option D is incorrect. Role can't be assigned to Attributes.
- Option E is correct. To grant access, roles can be assigned to groups, service principals, users, or managed identities at a particular scope.
- Option F is correct. To grant access, roles can be assigned to groups, service principals, users, or managed identities at a particular scope.
- Option G is correct. A role can be assigned to Service Principals.
- Option H is incorrect. Role can't be assigned to workflows.
- Option I is incorrect. Role can't be assigned to Orchestrations.

Reference:
To know more about Identity and Access Management, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/ready/enterprise-scale/identity-and-access-management

Ask our Experts
View Queries

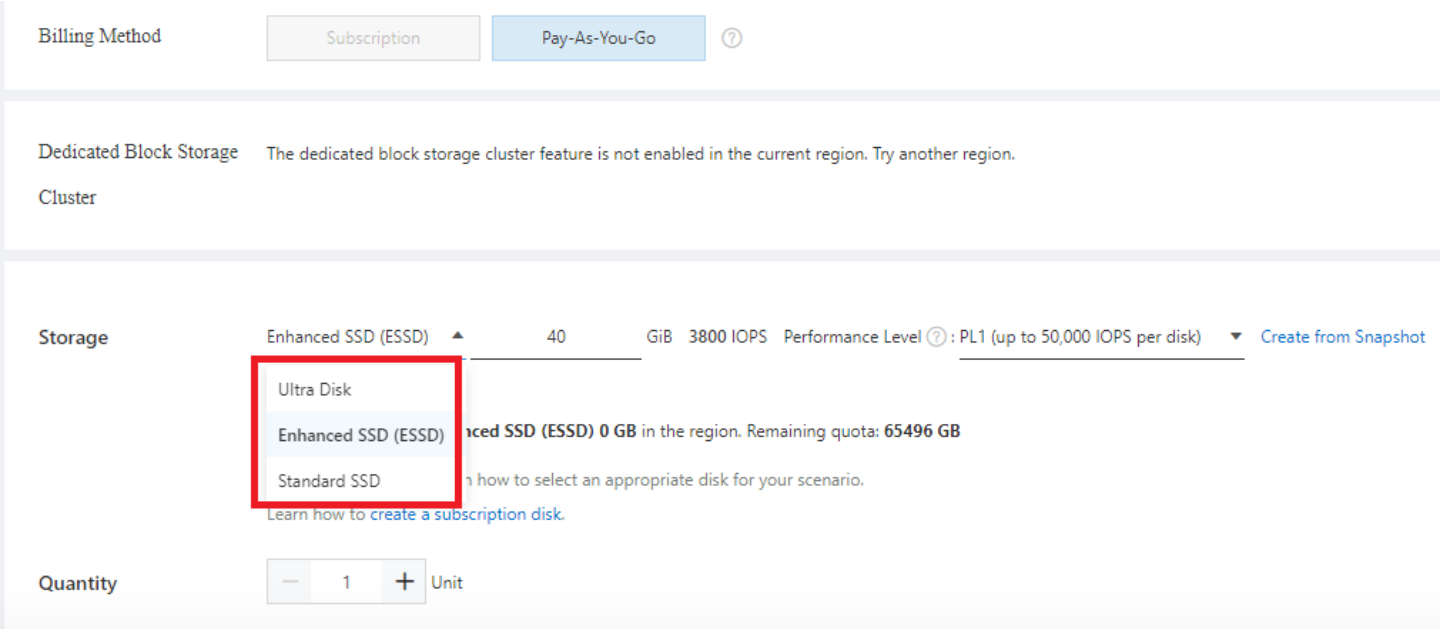
Question 38
Domain: Design and implement data security

While working in Azure Learning Institute, you are working with Azure SQL Managed Instance. Here is the list of some scenarios. Choose from the list the scenarios where you might need to provide a public endpoint connection with Azure SQL Managed Instance.

- A. The managed instance must integrate with multi-tenant-only PaaS offerings.
- B. You require higher throughput of data exchange than possible with VPN.
- C. Company policies/terms prohibit PaaS inside corporate networks.
- D. All the aboveright

Explanation:

Correct Answer: D
Here are the scenarios for public endpoint connection:



- Option A is incorrect. Not only this, but all scenarios need to provide a public endpoint connection.
- Option B is incorrect. Not only this, but all scenarios need to provide a public endpoint connection.
- Option C is incorrect. Not only this, but all scenarios need to provide a public endpoint connection.
- Option D is correct. You need to provide a public endpoint connection for all the given scenarios.

References:
To know more about public endpoints, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/public-endpoint-overview
- https://github.com/Jayvardhan-Reddy/Azure-Certification-DP-201

Ask our Experts
View Queries

Question 39

Domain: Monitor and optimize data storage and data processing

As the queries are submitted, a dedicated SQL pool query optimizer attempts to check which Data access paths will result in the minimum amount of effort to get the data needed to resolve the query. This cost-based optimizer will compare the cost of different query plans, and will then select the plan that has the minimum cost.

Statistics in a serverless SQL pool have the same aim of utilizing a cost-based optimizer to select a plan with the fastest execution. The thing is that how it generates the statistics is different.

Statement: In a serverless SQL pool, if statistics are missing, the query optimizer creates statistics on the whole tables in the query predicate or join condition to enhance the cardinality estimates for the query plan.

Select whether the statement is true or false.

- A. True
- B. Falseright

Explanation:

Correct Answer: B
As per the Azure documentation:

Reference:
To know more about Statistics in Synapse SQL, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-statistics

Ask our Experts
View Queries

Question 40

Domain: Monitor and optimize data storage and data processing

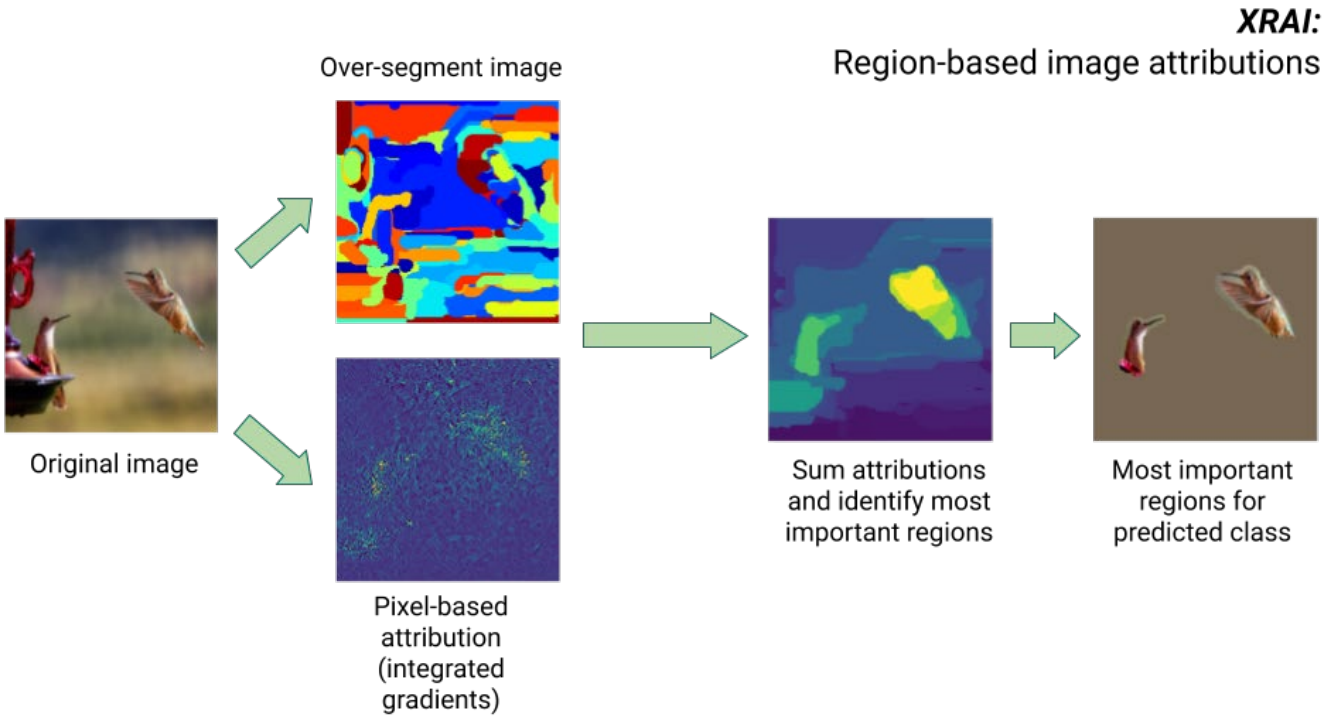
Combiner mode attempts to distribute huge skewed-key value sets to several vertices that support concurrent execution of the work. There are various attributes of combiner mode? What is the meaning of SqlUserDefinedCombiner(Mode=CombinerMode.Inner).

- A. Every output row potentially depends upon all the input rows from left and right with the same key value.
- B. Every output row depends upon a single input row from the left (and potentially all rows with the same key value from the right).
- C. Every output row depends upon a single input row from the right (and potentially all rows with the same key value from the left).
- D. Every output row depends upon a single input row from the left and the right with the same value.right
- E. None of these

Explanation:

Correct Answer: D

The following are the attributes of the combiner mode:



- Option A is incorrect. This is the description for SqlUserDefinedCombiner(Mode=CombinerMode.Full).
- Option B is incorrect. This is the description for SqlUserDefinedCombiner(Mode=CombinerMode.Left).
- Option C is incorrect. This is the description for SqlUserDefinedCombiner(Mode=CombinerMode.Right).
- Option D is correct. This is the description for SqlUserDefinedCombiner(Mode=CombinerMode.Inner).
- Option E is incorrect. D is the right answer.

Reference:

To know more about Resolve data-skew problems, please visit the below link:

- https://docs.microsoft.com/en-us/azure/data-lake-analytics/data-lake-analytics-data-lake-tools-data-skew-solutions

Ask our Experts

View Queries

Question 41

Domain: Design and implement data storage

You have been assigned the task to manage the storage of consumers profiles and Sales data. A general request is to create a list of *"the top 100 consumers including name, account number and sales around for a specific time period"* or *"who are the consumers within a particular geographic region?"*

Is Azure Blob storage a recommended choice for this data?

- A. Yes
- B. Noright

Explanation:

Correct Answer: B

Blob is not a recommended choice for structured data that needs to be queried regularly. Blobs have higher latency than memory and local disk and also do not have the indexing feature that increases the databases' efficiency at running queries.

Reference:

To know more about blobs, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction

Ask our Experts

View Queries

Question 42

Domain: Design and implement data storage

One of your friends needs to replace the content of a table. He is thinking of deleting the entire directory of the Delta table and creating a new table on the same path. Is this a recommended solution?

- A. Yes
- B. Noright

Explanation:

Correct Answer: B

The given solution is not recommended as:

- Deleting a directory is not effective. A directory with very large files can consume hours or even days to delete.
- You lose all content of the deleted files and it is quite hard to recover if you delete the wrong table.
- The directory deletion is not atomic. When you delete the table, a concurrent query reading the table might fail or see a partial table.

Reference:

To know more about best practices in Delta Lake, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/databricks/delta/best-practices

Ask our Experts

View Queries

Question 43

Domain: Design and implement data storage

Fill in the given blanks:

Star schema is a modeling technique widely adopted by relational data warehouses. In Star Schema, …….. tables store events or observations and …… tables define the business entities.

- A. Fact, Dimensionright
- B. Dimension, Fact
- C. 2D, 3D
- D. Structured and unstructured
- E. Unstructured and structured

Explanation:

Correct Answer: A
Dimension tables define business entities i.e the *things*, you model. Entities include people, products, concepts and places including time itself. Fact tables store events or observations and can be stock balances, sales orders, temperatures and exchange rates, etc. A fact table consists of dimension key columns related to dimension tables and numeric measure columns.

- Option A is correct. Fact tables and Dimension tables are the right answers.
- Option B is incorrect. Fact tables store events or observations and Dimension tables define business entities.
- Option C is incorrect. 2D and 3D is not the right answer.
- Option D is incorrect. Dimension and fact are two different types of tables used in Star Schema.
- Option E is incorrect. Dimension and fact are two different types of tables used in Star Schema.

Reference:
To know more about Star Schema, please visit the below-given link:

- https://docs.microsoft.com/en-us/power-bi/guidance/star-schema#star-schema-overview

Ask our Experts
View Queries

Question 44

Domain: Design and implement data storage
Azure Synapse Link for Azure Cosmos DB develops a tight integration between Azure Synapse Analytics and Azure Cosmos DB. How would you disable Azure Synapse Link for Azure Cosmos DB?

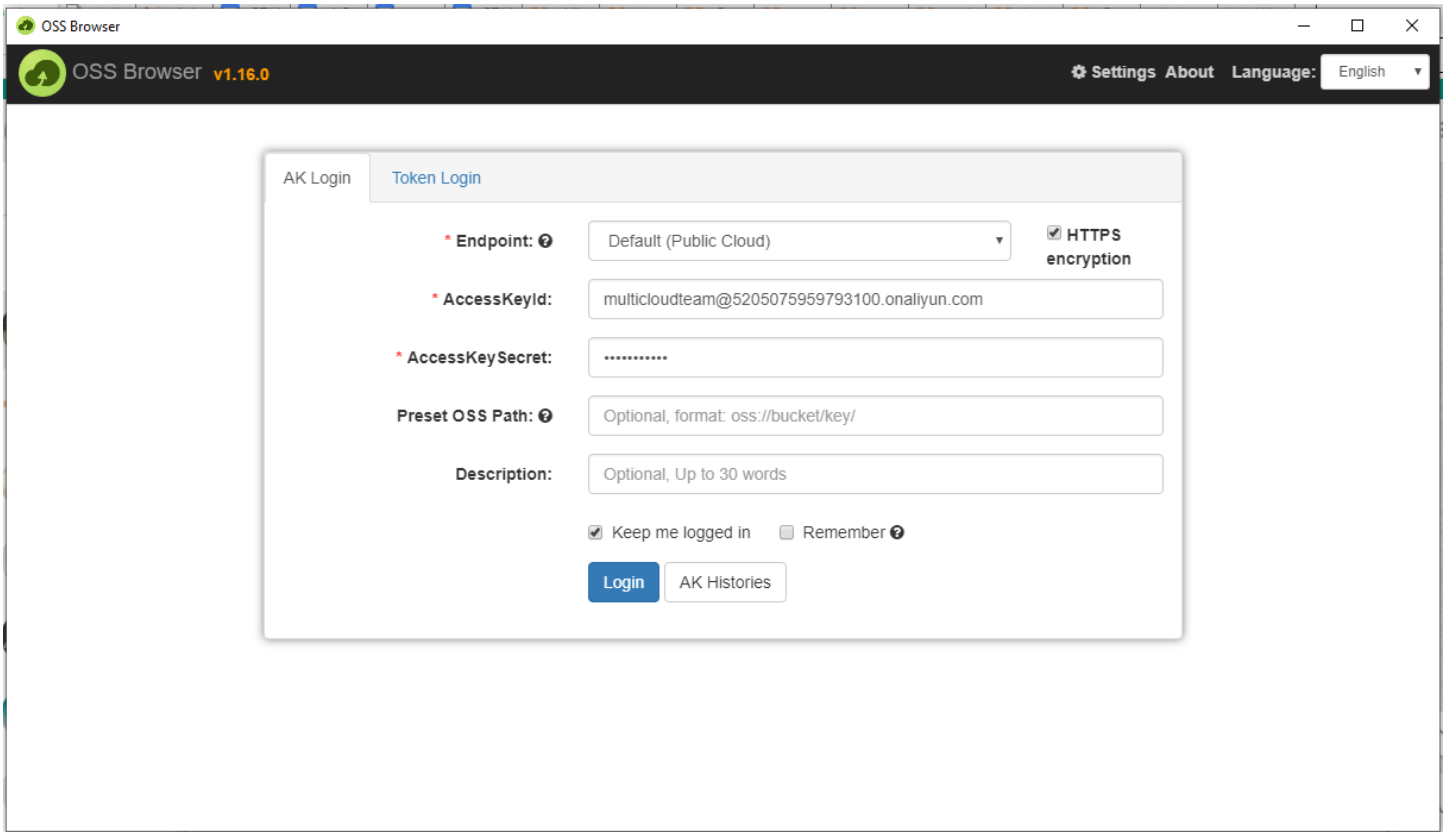
- A. Deleting the Azure Cosmos DB Container

- B. Deleting the Azure Cosmos DB accountright
- C. Setting the Azure Synapse Link option to disable on Azure Cosmos DB Container

- D. Setting the Azure Synapse Link option to disable on Azure Cosmos DB Instance

Explanation:

Correct Answer: B



Deleting the Azure Cosmos DB account with disable and removing Azure Synapse Link is the right option.

- Option A is incorrect. Deleting the Azure Cosmos DB Container is not the right choice.
- Option B is correct. Deleting the Azure Cosmos DB account with disabling and removing Azure Synapse Link is the right option.
- Option C is incorrect. Setting the Azure Synapse Link option to disabling on Azure Cosmos DB Container is not the right choice.
- Option D is incorrect. Setting the Azure Synapse Link option to disable on Azure Cosmos DB Instance

Reference:

To know more about Azure Synapse Link for Azure Cosmos DB, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/cosmos-db/synapse-link-frequently-asked-questions

Ask our Experts

View Queries

Question 45

Domain: Design and implement data storage

Azure Data Factory (ADF) is made up of 4 core components. These components work in collaboration to provide a platform that allows composing data-driven workflows with steps to move & transform data.

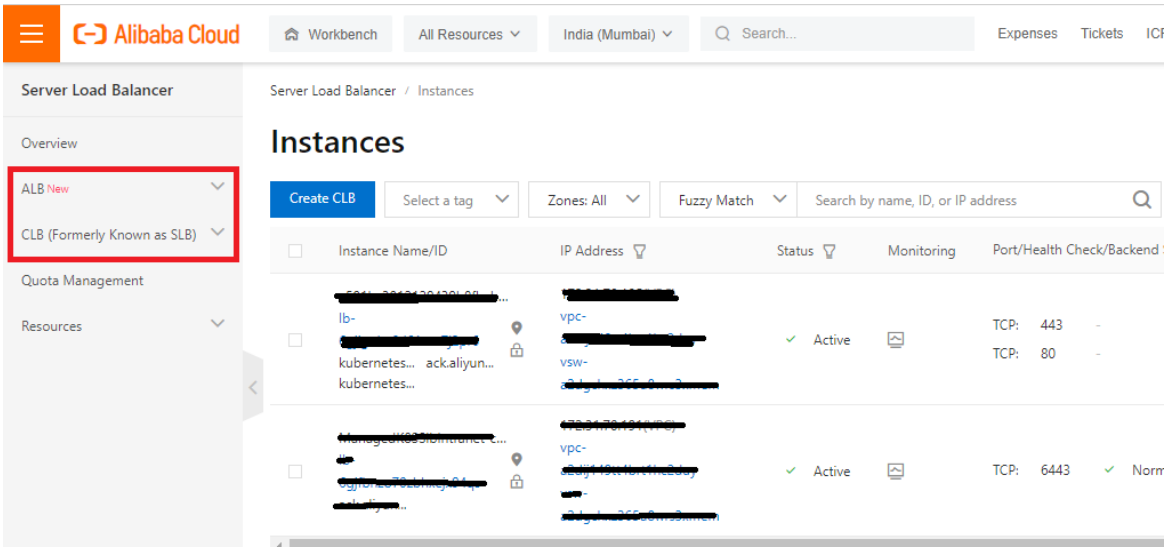
Which component can be described by:

"It is created to perform a specific task by composing the different activities in the task in a single workflow. This can be scheduled to execute, or a trigger can be defined that determines when an execution needs to be kicked off."

- A. Activity
- B. Pipelineright
- C. Dataset
- D. Linked Service
- E. None of these

Explanation:

Correct Answer: B
An Azure subscription can consist of 1 or more Azure Data Factory (ADF) instances. ADF is composed of 4 core components i.e Dataset, Activity, pipeline and Linked Services. These components work in collaboration to provide a platform where data-driven workflows can be composed with steps to move & transform data.



- Option A is incorrect. Activity is a specific action executed on the data in a pipeline like the ingestion or transformation of the data. Each pipeline may consist of 1 or more activities in it.
- Option B is correct. The given description is for Pipeline.
- Option C is incorrect. This is the data collected by users which are utilized as input for the ETL process. Datasets can be in various formats like CSV, JSON, text or ORC format.
- Option D is incorrect. Linked Service is not the right answer.
- Option E is incorrect. The given description is for Pipeline.

Reference:
To know more about Azure Data Factory, please visit the below-given link:

- https://www.educba.com/azure-data-factory/

Ask our Experts
View Queries

Question 46

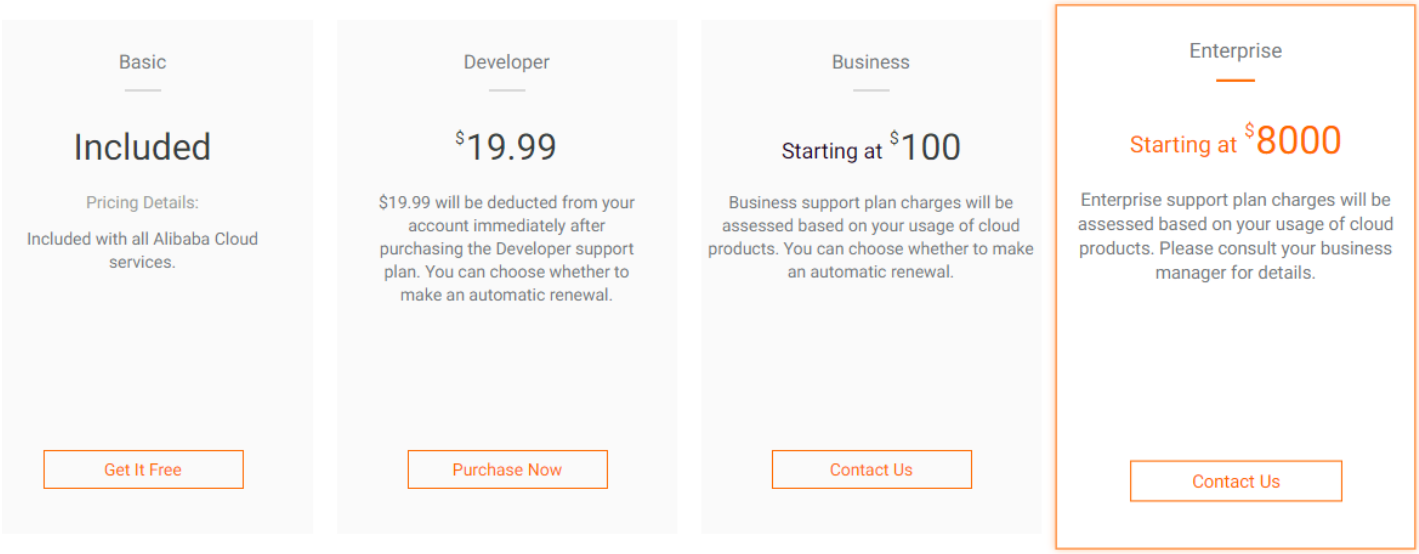
Domain: Design and implement data storage

For the migration of data from one to another data lake by involving Azure Data Lake Storage Gen2, Azure Blob, and Azure File Storage, you have the option to preserve the file metadata along with data. Which of the following data store built-in system properties can be preserved by the copy activity during data copy?

- A. contentType
- B. contentLanguage
- C. contentEncoding
- D. contentDisposition
- E. cacheControl
- F. All the aboveright

Explanation:

Correct Answer: F
The below given attributes can be preserved by the Copy activity during Data Copy:



- Option A is incorrect. Not only contentType, all the given datastore built-in system properties are preserved by Copy activity.
- Option B is incorrect. Not only contentLanguage, all the given datastore built-in system properties are preserved by Copy activity.
- Option C is incorrect. Not only contentEncoding, all the given datastore built-in system properties are preserved by Copy activity.
- Option D is incorrect. Not only contentDisposition, all the given datastore built-in system properties are preserved by Copy activity.
- Option E is incorrect. Not only cacheControl, all the given datastore built-in system properties are preserved by Copy activity.
- Option F is correct. All the given datastore built-in system properties i.e contentLanguage (except for Amazon S3), contentType, contentEncoding, cacheControl and contentDisposition are preserved by Copy activity.

Reference:
To know more about copy activity in ADF, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/data-factory/copy-activity-preserve-metadata

Ask our Experts
View Queries

Question 47

Domain: Design and develop data processing

The isolationLevel property in the Copy activity source section describes the transaction locking behavior for the SQL source. Which of the following are possible values for isolationLevel? (Select all that are applicable)

- A. ReadCommittedright
- B. ReadUncommittedright
- C. RepeatableReadright
- D. Serializableright
- E. Repeatable Write
- F. Non-Serializable
- G. Write committed
- H. Write uncommitted

Explanation:

Correct Answers: A, B, C and D
isolationLevel describes the transaction locking behavior for the SQL source. The allowed values for this property are: ReadUncommitted, ReadCommitted, , RepeatableRead, Snapshot and Serializable. If not mentioned, the default isolation level of the database is used.

- Option A is correct. Read committed is one of the allowed values for isolationLevel.
- Option B is correct. Read uncommitted is one of the allowed values for isolationLevel.
- Option C is correct. Repeatable Read is one of the allowed values for isolationLevel.
- Option D is correct. Serializable is one of the allowed values for isolationLevel.
- Option E is incorrect. Repeatable Write is not the allowed value for isolationLevel.
- Option F is incorrect. Non-Serializable is not the allowed value for isolationLevel.
- Option G is incorrect. Write Committed is not the allowed value for isolationLevel.
- Option H is incorrect. Write uncommitted is not the allowed value for isolationLevel.

Reference:
To know more about Copying and transforming data in Azure SQL Database, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/connector-azure-sql-database#error-row-handling

Ask our Experts
View Queries

Question 48
Domain: Design and develop data processing

When you create a notebook, you need to mention the pool either SQL or Spark Pool that needs to be connected to the notebook. In terms of languages, a notebook needs to be set with a primary language.

Statement: It is possible to utilize multiple languages in one notebook.

Choose the correct option regarding the statement above.

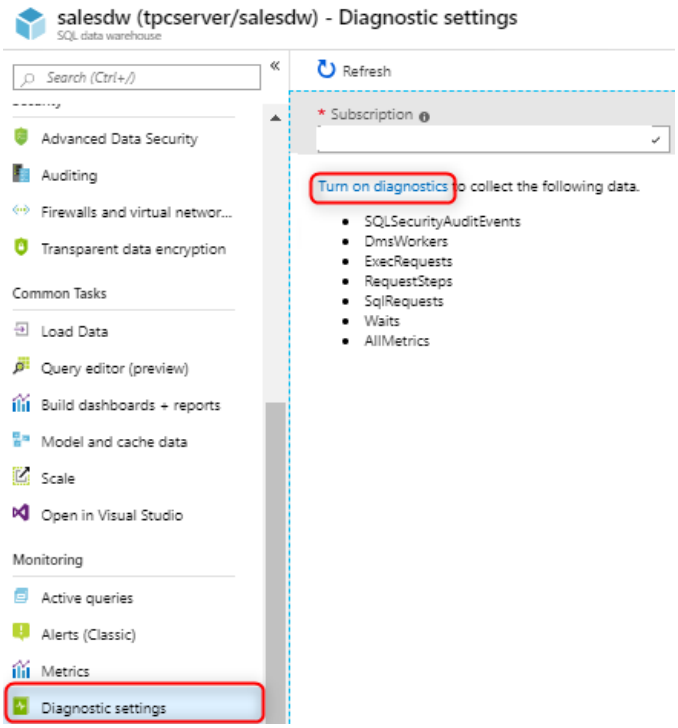
- A. Trueright
- B. False

Explanation:

Correct Answer: A
Here is the list of primary languages that are available within the notebook environment:

- PySpark (Python)
- NET Spark (C#)
- Spark (Scala)
- Spark SQL

It is possible to utilize multiple languages in one notebook by mentioning the language through a magic command at the beginning of a cell. The magic commands for switching the cell languages are given as below:



It is not possible to reference variables or data directly across multiple languages in a Synapse Studio notebook.

Reference:
To know more about creating, developing, and maintaining notebooks, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-development-using-notebooks?tabs=classical

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View Queries

Question 49

Domain: Design and develop data processing

If you don't specify the command option ("checkpointLocation", pointer-to-checkpoint directory) in Structured Streaming, what will happen?

- A. With the stoppage of the streaming job, all state data around the streaming job is lost and on the restart, the job must start from scratch.right
- B. With the stoppage of the streaming job, all state data around the streaming job is dumped to a default location and on the restart, the job must start from the aggregated data rather than tuned specific data.
- C. It won't be possible to create more than 1 streaming query that utilizes the same streaming source because of conflict issues.
- D. The streaming job will function as expected because of the non-existence of the checkpointLocation option.

Explanation:

Correct Answer: A

You need to set checkpointLocation for many sinks utilized in Structured Streaming. For the sinks where this setting is optional, if you don't set this value, you are at risk of losing your place in the stream.

- Option A is correct. If you don't specify the command option ("checkpointLocation", pointer-to-checkpoint directory) in Structured Streaming, With the stoppage of the streaming job, all state data around the streaming job is lost and on the restart, the job must start from scratch.
- Option B is incorrect. The given statement is not the potential result of not specifying the command option ("checkpointLocation", pointer-to-checkpoint directory) in Structured Streaming.
- Option C is incorrect. The statement is not a potential outcome of the given scenario.
- Option D is incorrect. The given statement is not the potential result of not specifying the command option ("checkpointLocation", pointer-to-checkpoint directory) in Structured Streaming.

Reference:

To know more about checkpoint storage in structured streaming, please visit the below-given link:

- https://www.waitingforcode.com/apache-spark-structured-streaming/checkpoint-storage-structured-streaming/read

Ask our Experts

View Queries

Question 50

Domain: Design and develop data processing

Your friend is new to the task and is asking you to advise which Azure product is the best choice for an ingestion point for data streaming in an event processing solution that utilizes static data as a source.

Which of the following would you advise to your friend?

- A. Azure Event Hub
- B. Azure Blob Storageright
- C. Azure Cosmos DB
- D. Power BI
- E. Azure IoT Hub

Explanation:

Correct Answer: B

Azure Blob storage offers an ingestion point for data streaming in an event processing solution that utilizes static data as a source.

- Option A is incorrect. Azure Event Hub is a large data streaming platform and event ingestion service, that can be used to feed events from event producers into Azure Stream Analytics.
- Option B is correct. Azure Blob storage offers an ingestion point for data streaming in an event processing solution that utilizes static data as a source.
- Option C is incorrect. Azure Cosmos Database is a fully managed NoSQL database for the development of modern applications. It can be utilized for storing the output of data stream processing in Azure Stream Analytics.
- Option D is incorrect. Power BI provides a platform to visualize and analyze the aggregated data in near-real-time. Azure Stream Analytics can target Power BI as an output destination.
- Option E is incorrect. Azure IoT Hub is not the right choice.

Reference:

To know more about event processing, please visit the below-given link:

- https://docs.microsoft.com/en-us/learn/modules/introduction-to-data-streaming/3-understand-event-processing

Ask our Experts

View Queries

Question 51

Domain: Design and develop data processing

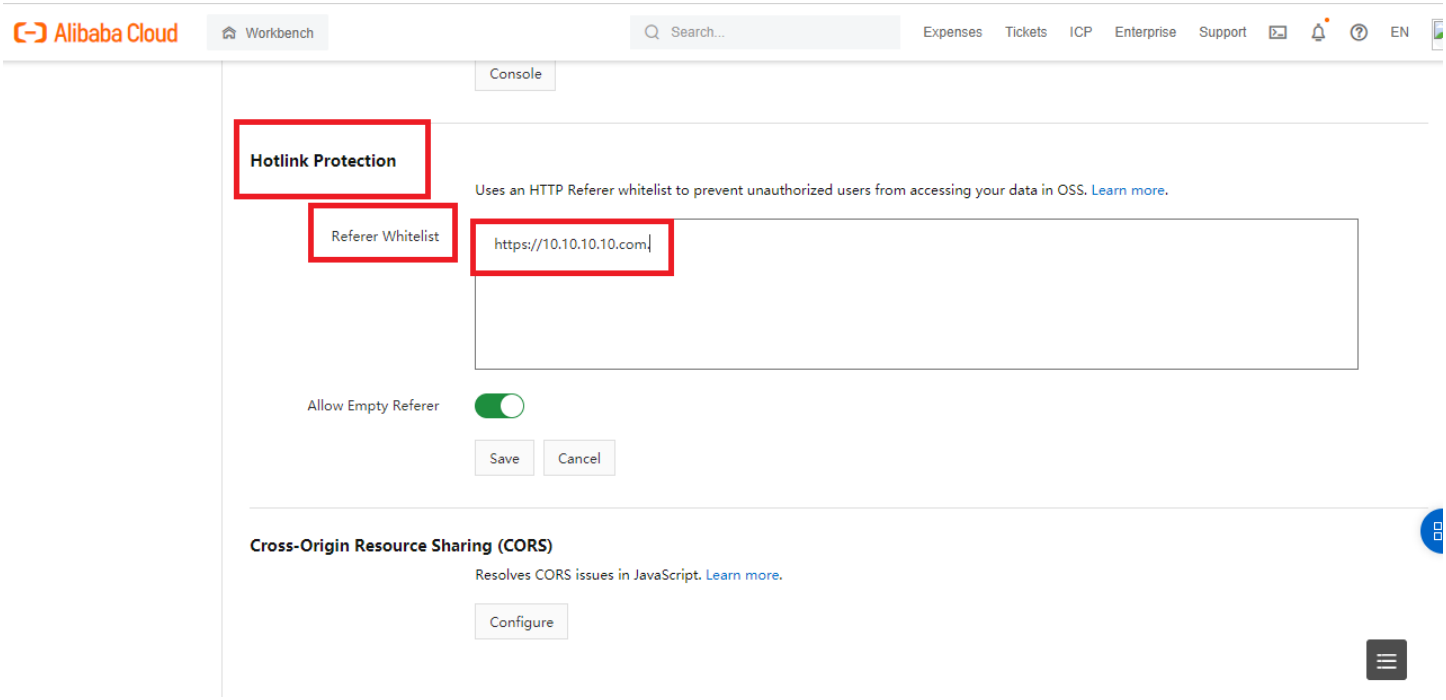
You have been tasked to create, start, and monitor a schedule trigger using Azure PowerShell. Which of the following cmdlet would you use in PowerShell to create a trigger?

- A. Set-AzDataFactoryV2Trigger right
- B. Set-ADFV2Trigger
- C. Get-AzDataFactoryV2Trigger
- D. Start-AzDataFactoryV2Trigger
- E. Start-ADFV2Trigger

Explanation:

Correct Answer: A

You need to use Set-AzDataFactoryV2Trigger cmdlet for creating trigger.



- Option A is correct. A trigger is created by using the Set-AzDataFactoryV2Trigger cmdlet.
- Option B is incorrect. Set-ADFV2Trigger is not the right command to create a trigger.
- Option C is incorrect. Get-AzDataFactoryV2Trigger is used to confirm the status of the trigger.
- Option D is incorrect. Start-AzDataFactoryV2Trigger is the right command to start a trigger.
- Option E is incorrect. Start-ADFV2Trigger is not the right command.

Reference:

To know more about schedule trigger, please visit the below given link:

- https://docs.microsoft.com/en-us/azure/data-factory/how-to-create-schedule-trigger?tabs=data-factory

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View Queries

Question 52

Domain: Design and implement data security0

To access data in your establishment storage account, your client makes requests over HTTPS or HTTP. Every request to a secure resource must be authorized.

Which of the following services would you use to ensure that the client has the required permission to access the data? (Choose the most suitable option)

- A. Private Link
- B. Azure AD
- C. Key vault
- D. RBACright
- E. Encryption

Explanation:

Correct Answer: D

The most suitable option is role-based access.

Azure Storage supports role-based access control (RBAC) and Azure Active Directory for both resource management and data operations. To security principals, RBAC roles can be assigned that are scoped to the storage account. Active Directory(AD) should be used to authorize resource management operations like configuration. AD is supported for data operations on Queue and blob storage.

To a security principal or a managed identity for Azure resources, you can use role-based access control (RBAC) roles that are scoped to a resource group, a subscription, a storage account, or an individual queue or container.

- Option A is incorrect. Private Link is not the right choice.
- Option B is incorrect. As clear from the explanation, Azure AD is not the best choice.
- Option C is incorrect. RBAC should be used in the given scenario.
- Option D is correct. To a security principal or a managed identity for Azure resources, you can use role-based access control (RBAC) roles that are scoped to a resource group, a subscription, a storage account, or an individual queue or container.
- Option E is incorrect. Encryption is not the correct option as it is used for the protection of sensitive data/information.

Reference:

To know more about role-based access control, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/role-based-access-control/overview

Ask our Experts

View Queries

Question 53

Domain: Design and implement data security

While working with DataFrames, you need to create a DataFrame object. Which of the following functions can you use to create the objects. (Select all that are applicable)

- A. Introduce a variable name and assign it to something like myDataFrameDF=right
- B. Execute createOrReplaceObject()
- C. Use DF.create() syntax
- D. Use function createDataFrame()right
- E. All the above

Explanation:

Correct Answers: A and D

First, introduce a variable name and then equate it to myDataFrameDF =" it is the right way to create the DataFrame objects. Also, DataFrame object can be created using createDataFrame() function.

- Option A is correct. Introduce a variable name and then equate it to myDataFrameDF =" it is the right way to create the DataFrame objects.
- Option B is incorrect. createOrReplaceObject() won't help in creating the DataFrame objects.
- Option C is incorrect. The given function is not the right way to create a DataFrame object.
- Option D is correct. DataFrame object can be created using *createDataFrame() function*.
- Option E is incorrect. Not E, A and D are the correct options.

Reference:

To know more about dataframes, please visit the below given links:

- https://docs.microsoft.com/en-us/azure/databricks/getting-started/spark/dataframes
- https://docs.microsoft.com/en-us/dotnet/api/microsoft.spark.sql.sparksession.createdataframe?view=spark-dotnet

Ask our Experts

View Queries

Question 54

Domain: Monitor and optimize data storage and data processing

Data Factory keeps pipeline-run data stored only for a specific time. Using Azure Monitor is the best option If you desire to keep the data for a longer time. By default, how long are the Azure Data Factory diagnostic logs retained for?

- A. 10 days
- B. 15 days
- C. 40 days
- D. 60 days
- E. None of theseright

Explanation:

Correct Answer: E

Pipeline-run data is stored by Data Factory only for 45 days. Using Azure Monitor is the best option If you desire to keep the data for a longer time. Azure Monitor, diagnostic logs can be routed for analysis to many different targets.

- Option A is incorrect. Pipeline-run data is stored by Data Factory for 45 days, not 10 days.
- Option B is incorrect. Pipeline-run data is stored by Data Factory for 45 days, not 15 days.
- Option C is incorrect. Pipeline-run data is stored by Data Factory for 45 days.
- Option D is incorrect. Pipeline-run data is stored by Data Factory only for 45 days, not 60 days.
- Option E is correct. Pipeline-run data is stored by Data Factory for 45 days.

Reference:

To know more about monitoring Data Factory, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/data-factory/monitor-using-azure-monitor

Ask our Experts

View Queries

Question 55

Domain: Monitor and optimize data storage and data processing
After an index is created in HyperSpace, several actions can be performed on it like

- Refresh the index if the underlying data changes
- Delete if the index is not needed
- Vacuum if an index is no longer needed

What do you mean by vacuum index?

- A. Delete Only the content of the index
- B. Restructure the index
- C. Physical deletion of the index contents and related metadata completely from Hyperspace's metadata.right
- D. Only remove the data while preserving the metadata
- E. Update the index

Explanation:

Correct Answer: C
Vacuuming an index means performing a hard delete i.e. removing files and the metadata entry completely for that index using the vacuumIndex command.

- Option A is incorrect. Vacuum the index does not mean to delete only the content.
- Option B is incorrect. Vacuum the index does not mean to restructure the index.
- Option C is correct. Vacuum the index means physical deletion of the index contents and related metadata completely from Hyperspace's metadata.
- Option D is incorrect. Vacuum the index deletes not only data but also metadata.
- Option E is incorrect. Updating the index is not the right answer.

Reference:
To know more about HyperSpace, please visit the below-given link:

- https://docs.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-performance-hyperspace?pivots=programming-language-csharp