Question 161	CertyIQ

HOTSPOT -
To complete the sentence, select the appropriate option in the answer area.
Hot Area:

Answer Area

In batch processing,

- data is always inserted one row at a time.
- data is processed in real-time.
- latency in delivering data processing results is acceptable.
- processing can only execute serially.

Answer Area

Correct Answer: In batch processing, ▼

data is always inserted one row at a time.
data is processed in real-time.
latency in delivering data processing results is acceptable.
processing can only execute serially.

Explanation:

Correct Answer:

When to use batch processing.

You might expect latencies when using batch processing. For many situations, however, this type of delay before the transfer of data begins is not a big issue - the processes that use this function are not mission critical at the exact moment.

Reference:

https://www.bmc.com/blogs/what-is-batch-processing-batch-processing-explained/

Question 162 | CertyIQ

Which statement is an example of Data Manipulation Language (DML)?

A. REVOKE

B. DISABLE

C. INSERT

D. GRANT

Explanation:

Correct Answer: C

Data Manipulation Language (DML) affect the information stored in the database. Use these statements to insert, update, and change the rows in the database.

BULK INSERT -

➥ DELETE

➥ INSERT

➥ SELECT

➥ UPDATE

➥ MERGE

Reference:

https://docs.microsoft.com/en-us/sql/t-sql/statements/statements

Question 163   CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

In a relational database, each row in a table has

a different set of columns
a key-value pair
the same set of columns
unstructured data

Answer Area

Correct Answer:

In a relational database, each row in a table has

a different set of columns
a key-value pair
the same set of columns
unstructured data

Explanation:

Correct Answer:

The same set of columns.

In relational databases, a row is a data record within a table. Each row, which represents a complete record of specific item data, holds different data within the same structure. A row is occasionally referred to as a tuple.

Incorrect:

Not: a key value pair.

Unlike relational databases, key-value databases do not have a specified structure. Relational databases store data in tables where each column has an assigned data type. Key-value databases are a collection of key-value pairs that are stored as individual records and do not have a predefined data structure.

Reference:

https://www.techopedia.com/definition/4425/database-row

https://www.techtarget.com/searchdatamanagement/tip/NoSQL-database-types-explained-Key-value-store

Question 164   CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.

Hot Area:

Answer Area

Varying fields for each entity in a JSON document is an example of [▼]

| relational data. |
| semi-structured data. |
| structured data. |
| unstructured data. |

Answer Area

Correct Answer:

Varying fields for each entity in a JSON document is an example of [▼]

| relational data. |
| semi-structured data. |
| structured data. |
| unstructured data. |

Explanation:

Correct Answer:

For some semi-structured data formats (e.g. JSON), data sets are frequently a simple concatenation of multiple documents.

Reference:

https://docs.snowflake.com/en/user-guide/semistructured-considerations.html

Question 165

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

A JSON document is an example of [▼]

| graph data. |
| relational data. |
| semi-structured data. |
| unstructured data. |

Answer Area

Correct Answer:

A JSON document is an example of [▼]

| graph data. |
| relational data. |
| semi-structured data. |
| unstructured data. |

Explanation:

Correct Answer:

Semi-structured data -

Semi-structured data (e.g., JSON, CSV, XML) is the bridge between structured and unstructured data. It does not have a predefined data model and is more complex than structured data, yet easier to store than unstructured data.

Reference:

https://www.ibm.com/cloud/blog/structured-vs-unstructured-data

Question 166 — CertyIQ

Which property of a transactional workload guarantees that each transaction is treated as a single unit that either succeeds completely or fails completely?

A. atomicity

B. isolation

C. durability

D. consistency

Explanation:

Correct Answer: A

The purpose of making transactions atomic is to prevent different transactions from interfering with one another. This can only happen if more than one user process is trying to access the database at the same time, as when a server allows several clients to use it concurrently. The simplest way to enforce atomicity is for the DBMS to refuse to start any transaction until the previous one has committed.
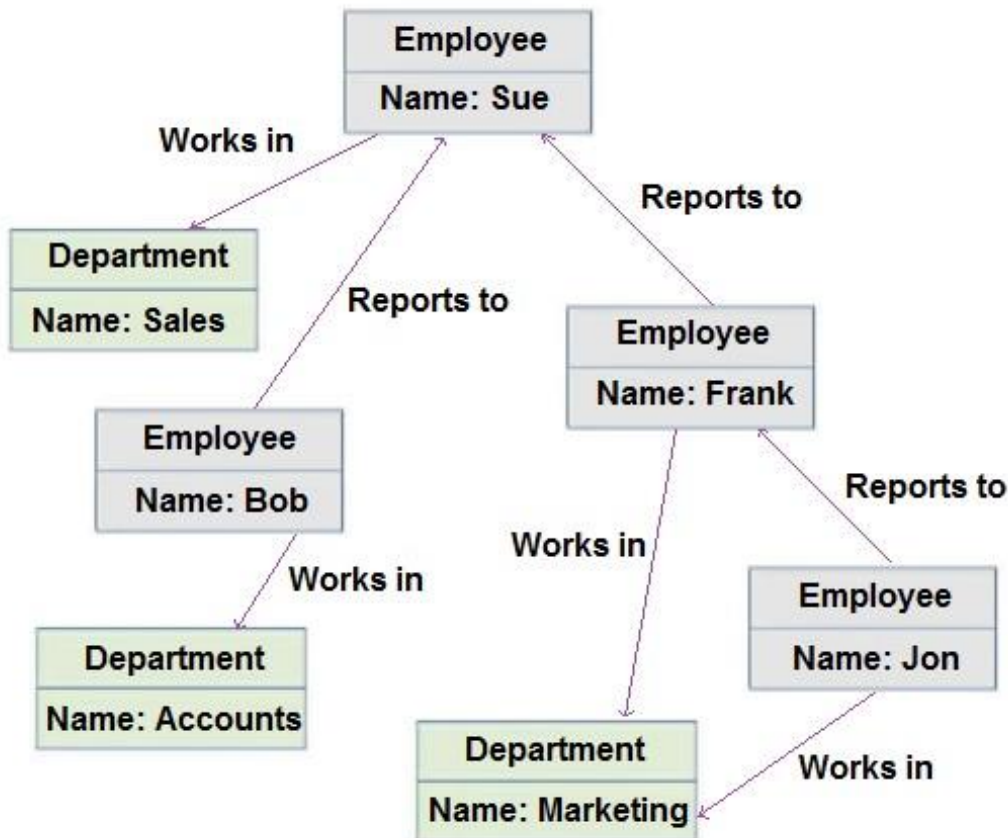
Reference:

https://www.sciencedirect.com/topics/computer-science/atomic-transaction

Question 167 — CertyIQ

ou have a data store that has the structure shown in the following exhibit.

Which type of data store is this?

A. key/value

B. object data

C. graph

D. time series

Explanation:

Correct Answer: C

A graph database stores two types of information, nodes and edges. Edges specify relationships between nodes. Nodes and edges can have properties that provide information about that node or edge, similar to columns in a table. Edges can also have a direction indicating the nature of the relationship.

Reference:

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

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Question 168   CertyIQ

Which type of database contains nodes and edges?

A. graph

B. key/value

C. columnar

D. time series

Explanation:

Correct Answer: A

A graph database stores two types of information, nodes and edges. Edges specify relationships between nodes. Nodes and edges can have properties that provide information about that node or edge, similar to columns in a table. Edges can also have a direction indicating the nature of the relationship.

Reference:

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

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Question 169	CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

A data analyst ▼	is responsible for identifying which business rules
A data analyst	must be applied to the data of a company.
A data engineer	
A data scientist	

Answer Area

Correct Answer:

A data analyst ▼	is responsible for identifying which business rules
A data analyst	must be applied to the data of a company.
A data engineer	
A data scientist	

Explanation:

Correct Answer:

A data analyst's primary skill set revolves around data acquisition, handling, and processing.

Incorrect:

* A data engineer requires an intermediate level understanding of programming to build thorough algorithms along with a mastery of statistics and math.

* A data scientist needs to be a master of both worlds. Data, stats, and math along with in-depth programming knowledge for Machine Learning and Deep

Learning.

Reference:

https://www.edureka.co/blog/data-analyst-vs-data-engineer-vs-data-scientist/

Question 170 — CertyIQ

DRAG DROP -
Match the tools to the appropriate descriptions.
To answer, drag the appropriate tool from the column on the left to its description on the right. Each tool may be used once, more than once, or not at all.
Select and Place:

Tools

Azure Data Studio
Microsoft SQL Server Data Tools (SSDT)
Microsoft SQL Server Management Studio (SSMS)

Answer Area

Tool	A graphical tool for managing SQL Server or Azure SQL databases that supports access, configuration, management, and administration tasks.
Tool	A lightweight editor that can run on-demand SQL queries and view and save results as text, JSON, or Microsoft Excel files.
Tool	A development tool for building Azure SQL databases, Microsoft SQL Server relational databases, SQL Server Analysis Services (SSAS) data models, SQL Server Integration Services (SSIS) packages, and SQL Server Reporting Services (SSRS) reports.

Correct Answer:

Tools

Answer Area

Microsoft SQL Server Management Studio (SSMS)	A graphical tool for managing SQL Server or Azure SQL databases that supports access, configuration, management, and administration tasks.
Azure Data Studio	A lightweight editor that can run on-demand SQL queries and view and save results as text, JSON, or Microsoft Excel files.
Microsoft SQL Server Data Tools (SSDT)	A development tool for building Azure SQL databases, Microsoft SQL Server relational databases, SQL Server Analysis Services (SSAS) data models, SQL Server Integration Services (SSIS) packages, and SQL Server Reporting Services (SSRS) reports.

Explanation:

Correct Answer:

Box 1: Microsoft SQL Server Management Studio (SSMS)

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database.

Box 2: Azure Data Studio -

Azure Data Studio offers a modern, keyboard-focused SQL coding experience that makes your everyday tasks easier with built-in features, such as multiple tab windows, a rich SQL editor, IntelliSense, keyword completion, code snippets, code navigation, and source control integration (Git). Run on-demand SQL queries, view and save results as text, JSON, or Excel. Edit data, organize your favorite database connections, and browse database objects in a familiar object browsing experience.

Box 3: Microsoft SQL Server Data Tools (SSDT)

SQL Server Data Tools (SSDT) is a modern development tool for building SQL Server relational databases, databases in Azure SQL, Analysis Services (AS) data models, Integration Services (IS) packages, and Reporting Services (RS) reports. With SSDT, you can design and deploy any SQL Server content type with the same ease as you would develop an application in Visual Studio.

Reference:

https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms
https://code.visualstudio.com/docs/supporting/FAQ https://docs.microsoft.com/en-us/sql/azure-data-studio/what-is-azure-data-studio https://docs.microsoft.com/en-us/sql/ssdt/download-sql-server-data-tools-ssdt

Question 171   CertyIQ

Your company needs to ensure that an Azure virtual machine can connect to Azure SQL databases without exposing the databases to the internet.

What should you use?

A. Azure Application Gateway

B. Azure Traffic Manager

C. Azure DNS

D. Azure Private Link

Explanation:

Correct Answer: D

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

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

Reference:

https://techcommunity.microsoft.com/t5/azure-database-support-blog/azure-sql-db-private-link-private-endpoint-connectivity/ba-p/1235573

Question 172   CertyIQ

DRAG DROP -
Match the Azure SQL services to the appropriate use cases.
To answer, drag the appropriate service from the column on the left to its use case on the right. Each service may be used once, more than once, or not at all.
NOTE: Each correct match its worth one point.
Select and Place:

Azure SQL services	Answer Area	
Azure SQL Database elastic pool		A serverless configuration
Azure SQL Database single database		A database that has the highest compatibility with on-premises Microsoft SQL Server
Azure SQL Managed instance		A low-cost, low-maintenance database

Azure SQL services	Answer Area	
Azure SQL Database elastic pool	Azure SQL Database single database	A serverless configuration
Azure SQL Database single database	Azure SQL Managed instance	A database that has the highest compatibility with on-premises Microsoft SQL Server
Azure SQL Managed instance	Azure SQL Database elastic pool	A low-cost, low-maintenance database

Correct Answer:

Explanation:

Correct Answer:

Box 1: Azure SQL Database single database

Serverless is a compute tier for single databases in Azure SQL Database that automatically scales compute based on workload demand and bills for the amount of compute used per second. The serverless compute tier also automatically pauses databases during inactive periods when only storage is billed and automatically resumes databases when activity returns.

Scenarios well suited for serverless compute

Single databases with intermittent, unpredictable usage patterns interspersed with periods of inactivity, and lower average compute utilization over time.

Single databases in the provisioned compute tier that are frequently rescaled and customers who prefer to delegate compute rescaling to the service.

New single databases without usage history where compute sizing is difficult or not possible to estimate prior to deployment in SQL Database.

Box 2: Azure SQL Managed Instance

Azure SQL Managed Instance is the intelligent, scalable cloud database service that combines the broadest SQL Server database engine compatibility with all the benefits of a fully managed and evergreen platform as a service.

Box 3: Azure SQL Database elastic pool

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

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/database/serverless-tier-overview?view=azuresql
https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview?view=azuresql
https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/sql-managed-instance-paas-overview

Question 173 | CertyIQ

Which T-SQL statement should be used to instruct a database management system to use an index instead of performing a full table scan?

A. SELECT

B. WHERE

C. JOIN

Explanation:

Correct Answer: A

Table hints override the default behavior of the Query Optimizer for the duration of the data manipulation language (DML) statement by specifying a locking method, one or more indexes, a query-processing operation such as a table scan or index seek, or other options. Table hints are specified in the FROM clause of the DML statement and affect only the table or view referenced in that clause.

This applies to the following commands:

DELETE -

INSERT -

SELECT -

UPDATE -

MERGE -

Reference:

https://docs.microsoft.com/en-us/sql/t-sql/queries/hints-transact-sql-table

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Question 174	Certy**IQ**

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

▼	is a platform as a service (PaaS) relational data service
Azure SQL Database	that uses massively parallel processing (MPP).
Azure Synapse Analytics	
Azure Database for MariaDB	
SQL Server on Azure virtual machines	

Answer Area

Correct Answer:

▼	is a platform as a service (PaaS) relational data service
Azure SQL Database	that uses massively parallel processing (MPP).
Azure Synapse Analytics	
Azure Database for MariaDB	
SQL Server on Azure virtual machines	

Explanation:

Correct Answer:

Azure Synapse Analytics is an platform as a service (PAAS) that combines data integration, warehousing, and analytics into one solution.

Azure Synapse Analytics offers cloud-based, relational data warehousing services, massively parallel processing (MPP) scale-out technology, and enough computational power to efficiently manage petabytes and petabytes of data.

Incorrect:

* Azure Database for MariaDB is a relational database service based on the open-source MariaDB Server engine. It's a fully managed database as a service offering that can handle mission-critical workloads with predictable performance and dynamic scalability.

* Azure SQL Database is a fully managed platform as a service (PaaS) database engine that handles most of the database management functions such as upgrading, patching, backups, and monitoring without user involvement. Azure SQL Database is always running on the latest stable version of the SQL Server database engine and patched OS with 99.99% availability. PaaS capabilities built into Azure SQL Database enable you to focus on the domain-specific database administration and optimization activities that are critical for your business.

Reference:

https://cswsolutions.com/blog/posts/2021/august/what-is-azure-synapse-analytics/
https://www.integrate.io/blog/what-is-azure-synapse-analytics/

Question 175 — CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

	physically sorts the data in a table
A view	based on the values in a specified column.
A clustered index	
A stored procedure	
A nonclustered index	

Answer Area

Correct Answer:

A view	physically sorts the data in a table
A clustered index	based on the values in a specified column.
A stored procedure	
A nonclustered index	

Explanation:

Correct Answer:

A clustered index defines the order in which data is physically stored in a table. Table data can be sorted in only way, therefore, there can be only one clustered index per table. In SQL Server, the primary key constraint automatically creates a clustered index on that particular column.A

Reference:

https://www.sqlshack.com/what-is-the-difference-between-clustered-and-non-clustered-indexes-in-sql-server

Question 176

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

In a relational database, the [▼] uniquely identifies each row in a table

- foreign key
- primary key
- WHERE clause
- nonclustered index

Correct Answer:

Answer Area

In a relational database, the [▼] uniquely identifies each row in a table

- foreign key
- **primary key**
- WHERE clause
- nonclustered index

Explanation:

Correct Answer:

A primary key is a special relational database table column (or combination of columns) designated to uniquely identify each table record (row).

Reference:

https://www.techopedia.com/definition/5547/primary-key

Question 177

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

[▼] presents content defined by a query.

- A heap
- A stored procedure
- A view
- An index

Answer Area

Correct Answer:

A heap
A stored procedure
A view
An index

▼ presents content defined by a query.

Explanation:

Correct Answer: A View

A database view is a subset of a database and is based on a query that runs on one or more database tables.

Reference:

https://www.ibm.com/docs/SSWT9A_7.6.0/com.ibm.mbs.doc/configur/c_views.html

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Question 178   CertyIQ

Which Azure service provides the highest compatibility for databases migrated from Microsoft SQL Server 2019 Enterprise edition?

A. Azure SQL Database

B. Azure Database for MySQL

C. Azure SQL Managed Instance

D. an Azure SQL Database elastic pool

Explanation:

Correct Answer: C

SQL Managed Instance has near 100% compatibility with the latest SQL Server (Enterprise Edition) database engine, providing a native virtual network (VNet) implementation that addresses common security concerns, and a business model favorable for existing SQL Server customers.

Note: Azure SQL Managed Instance is the intelligent, scalable cloud database service that combines the broadest SQL Server database engine compatibility with all the benefits of a fully managed and evergreen platform as a service.

Reference:

https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/sql-managed-instance-paas-overview?view=azuresql

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Question 179   CertyIQ

Which storage solution supports role-based access control (RBAC) at the file and folder level?

A. Azure Disk Storage

B. Azure Data Lake Storage

C. Azure Blob storage

D. Azure Queue storage

Explanation:

Correct Answer: B

Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs). This article summarizes the basics of the access control model for Data Lake Storage Gen2.

ACLs are applied on the file and folder level. The key thing to remember is that you are always going to need RBAC Control Plane permissions in combination with ACLs. Best practice is to assign your security principals RBAC Reader role on the Storage Account/Container level and continue with more restrictive ACLs on the file and folder level.

There are two types of ACLs:

Access ACLs: They control access to an object. An object can be a file or a folder.

Default ACLs: These are ACLs assigned on the folder level only which get inherited as Access ACLs by the child file or folder.

Question 180 CertyIQ

You need to store data in Azure Blob storage for seven years to meet your company's compliance requirements. The retrieval time of the data is unimportant. The solution must minimize storage costs.

Which storage tier should you use?

A. Archive

B. Hot

C. Cool

Explanation:

Correct Answer: A -> Archive

Hot - Optimized for storing data that is accessed frequently.

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

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

Question 181 CertyIQ

Which type of non-relational data store supports a flexible schema, stores data as JSON files, and stores the all the data for an entity in the same document?

A. document

B. columnar

C. graph

D. time series

Explanation:

Question 182 | CertyIQ

What are three characteristics of an Online Transaction Processing (OLTP) workload? Each correct answer presents a complete solution. (Choose three.)

NOTE: Each correct selection is worth one point.

A. denormalized data

B. heavy writes and moderate reads

C. light writes and heavy reads

D. schema on write

E. schema on read

F. normalized data

Explanation:

Correct Answer: BDF

OLTP

Schema: Schema on write, strongly enforced

Workload: Heavy writes, moderate reads

Normalization: Highly normalized

B: Transactional data tends to be heavy writes, moderate reads.

D: Typical traits of transactional data include: schema on write, strongly enforced

F: Transactional data tends to be highly normalized.

Reference:

https://docs.microsoft.com/en-us/azure/architecture/data-guide/relational-data/online-transaction-processing

Question 183 | CertyIQ

Which two activities can be performed entirely by using the Microsoft Power BI service without relying on Power BI Desktop? Each correct answer presents a complete solution. (Choose two.)

NOTE: Each correct selection is worth one point.

A. report and dashboard creation

B. report sharing and distribution

C. data modeling

D. data acquisition and preparationS

Explanation:

Correct Answer: AB

A. Dashboard -> Services Only, Report - Services also OK

B. Sharing -> Services Only.

C. Modeling -> Desktop Only

D. Data acquisition -> Mandy data sources -> Desktop

- - - - - - - - - - - - -

B. correct for sure

C. must wrong

Due to Desktop not for Dashboards, so A better than D.

- - - - - - - - - - - - - -

So, A & B for me.

With Power BI Desktop, you can connect to multiple different sources of data, and combine them (often called modeling) into a data model.

Similarly, data acquisition (from a single source or multiple sources) and preparation (transformation and cleaning of data) are done using power bi desktop.

Without PowerBI Desktop, the only options left are A and B, which come under power bi service.

Ref: https://docs.microsoft.com/en-us/power-bi/fundamentals/desktop-what-is-desktop

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Question 184 CertyIQ

HOTSPOT -
To complete the sentence, select the appropriate option in the answer area.
Hot Area:

Answer Area

You can query a graph database in Azure Cosmos DB ▼

| as a JSON document by using a SQL-like language. |
| as a partitioned row store by using Cassandra Query Language (CQL). |
| as a partitioned row store by using Language-Integrated Query (LINQ). |
| as nodes and edges by using the Gremlin language. |

Suggested Answer:

Answer Area

You can query a graph database in Azure Cosmos DB ▼

| as a JSON document by using a SQL-like language. |
| as a partitioned row store by using Cassandra Query Language (CQL). |
| as a partitioned row store by using Language-Integrated Query (LINQ). |
| **as nodes and edges by using the Gremlin language.** |

Explanation:

Correct Answer: Gremlin API.

https://docs.microsoft.com/en-us/azure/cosmos-db/graph-introduction

Querying a graph database is done using Gremlin language.

Note: Gremlin language is not a SQL-like language. It is based on gremlin API.

Example: g.V().hasLabel('person').has('age', gt(40)) --- filter query

---

Question 185

You need to develop a solution to provide data to executives. The solution must provide an interactive graphical interface, depict various key performance indicators, and support data exploration by using drill down.

What should you use in Microsoft Power BI?

A. a dashboard

B. a report

C. a dataflow

D. Microsoft Power Apps

Explanation:

Correct Answer: A Dasboard.

as it requires interactive graphical interface with KPIs and drilldown. You can achieve that in dashboard.

Question 186

What is a benefit of the Azure Cosmos DB Table API as compared to Azure Table storage?

A. provides resiliency if an Azure region fails

B. supports partitioning

C. provides a higher storage capacity

D. supports a multi-master model

Explanation:

Correct Answer: The multi-master

tested in Azure portal.

1. create account in Azure Cosmo DB account

2. under left hand menu bar, locate "Settings" --> "Replicate data globally" <-- click it

3. Turn on "Enable" --> "Multi-region writers. explanation shown in "!" mark :

Multi-master capability allows you to take advantage of the provisioned throughput for your databases and containers across the globe.

Question 187 — CertyIQ

Your company needs to design a database that shows how changes in network traffic in one area of a network affect network traffic in other areas of the network.

Which type of data store should you use?

A. graph

B. key/value

C. document

D. columnar

Explanation:

Correct Answer: A

Data as it appears in the real world is naturally connected. Traditional data modeling focuses on defining entities separately and computing their relationships at runtime. While this model has its advantages, highly connected data can be challenging to manage under its constraints.

A graph database approach relies on persisting relationships in the storage layer instead, which leads to highly efficient graph retrieval operations. Azure Cosmos

DB's Gremlin API supports the property graph model.

Reference:

https://docs.microsoft.com/en-us/azure/cosmos-db/graph-introduction#introduction-to-graph-databases

Question 188 — CertyIQ

Which three objects can be added to a Microsoft Power BI dashboard? Each correct answer presents a complete solution. (Choose three.)

NOTE: Each correct selection is worth one point.

A. a report page

B. a Microsoft PowerPoint slide

C. a visualization from a report

D. a dataflow

E. a text box

Explanation:

Correct Answer: ACE

A "Page Report", you can pin a whole page to panel, from Power bi service.

Reference:

https://docs.microsoft.com/en-us/power-bi/consumer/end-user-dashboards

Question 189 CertyIQ

DRAG DROP -
Match the datastore services to the appropriate descriptions.
To answer, drag the appropriate service from the column on the left to its description on the right. Each service may be used once, more than once, or not at all.
NOTE: Each correct match is worth one point.
Select and Place:

Services

| Azure Blob storage |
| Azure Cosmos DB |
| Azure Files |
| Azure Table storage |

Answer Area

| Service | Enables the use of SQL queries against data stored in JSON documents |
| Service | Enables users to access data by using the Server Message Block (SMB) version 3 protocol |

Suggested Answer:

Services

| Azure Blob storage |
| Azure Cosmos DB |
| Azure Files |
| Azure Table storage |

Answer Area

| Azure Cosmos DB | Enables the use of SQL queries against data stored in JSON documents |
| Azure Files | Enables users to access data by using the Server Message Block (SMB) version 3 protocol |

Explanation:

Correct Answer:

Box 1: Azure Cosmos DB -

In Azure Cosmos DB's SQL (Core) API, items are stored as JSON. The type system and expressions are restricted to deal only with JSON types.

Box 2: Azure Files -

Azure Files offers native cloud file sharing services based on the SMB protocol.

Reference:

https://docs.microsoft.com/en-us/azure/cosmos-db/sql-query-working-with-json

https://cloud.netapp.com/blog/azure-smb-server-message-block-in-the-cloud-for-azure-files

Question 189   CertyIQ

Which Azure Data Factory component provides the compute environment for activities?

A. a linked service

B. an integration runtime

C. a control flow

D. a pipeline

Explanation:

Correct Answer: B

The Integration Runtime (IR) is the compute infrastructure used by Azure Data Factory to provide the following data integration capabilities across different network environments:

▭ Data Flow

▭ Data movement

▭ Activity dispatch

▭ SSIS package execution

Reference:

https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime

Question 190   CertyIQ

You need to store data by using Azure Table storage.

What should you create first?

A. an Azure Cosmos DB instance

B. a storage account

C. a blob container

D. a table

Explanation:

Correct Answer: B

First create an Azure storage account, then use Table service in the Azure portal to create a table.

Note: An Azure storage account contains all of your Azure Storage data objects: blobs, files, queues, and tables.

Reference:

https://docs.microsoft.com/en-us/azure/storage/tables/table-storage-quickstart-portal

https://docs.microsoft.com/en-us/azure/storage/common/storage-account-create

Question 191

You need to recommend a data store service that meets the following requirements:

☞ Native SQL API access

☞ Configurable indexes

What should you recommend?

A. Azure Files

B. Azure Blob storage

C. Azure Table storage

D. Azure Cosmos DB

Explanation:

Correct Answer: D

Azure Cosmos DB comes with native Core (SQL) API support.

In Azure Cosmos DB, data is indexed following indexing policies that are defined for each container. The default indexing policy for newly created containers enforces range indexes for any string or number. This policy can be overridden with your own custom indexing policy.

Reference:

https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-manage-indexing-policy

Question 192

HOTSPOT -
For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.
Hot Area:

Answer Area

Statements	Yes	No
Azure Table storage within a single Azure Storage account supports multiple concurrent reads in different Azure regions.	○	○
Azure Table storage within a single Azure Storage account supports multiple concurrent writes in different Azure regions.	○	○
An Azure Cosmos DB account that uses the Table API supports multiple concurrent reads in different Azure regions.	○	○
An Azure Cosmos DB account that uses the Table API supports multiple concurrent writes in different Azure regions.	○	○

Answer Area

Statements	Yes	No
Azure Table storage within a single Azure Storage account supports multiple concurrent reads in different Azure regions.	●	○
Azure Table storage within a single Azure Storage account supports multiple concurrent writes in different Azure regions.	○	●
An Azure Cosmos DB account that uses the Table API supports multiple concurrent reads in different Azure regions.	●	○
An Azure Cosmos DB account that uses the Table API supports multiple concurrent writes in different Azure regions.	●	○

Suggested Answer:

Explanation:

Correct Answer:

Box 1: Yes -

For read access to the secondary region, configure your storage account to use read-access geo-redundant storage (RA-GRS) or read-access geo-zone- redundant storage (RA-GZRS).

Box 2: No -

Box 3: Yes -

Box 4: Yes -

Azure Cosmos DB supports multi-region writes.

Ref: https://docs.microsoft.com/en-au/azure/storage/common/storage-redundancy#read-access-to-data-in-the-secondary-region

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

Reference:

https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy
https://manojchoudhari.wordpress.com/2019/12/16/azure-cosmos-db-enable-multi-region-writes

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Question 193 CertyIQ

HOTSPOT -
For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
You can copy a dashboard between Microsoft Power BI workspaces.	○	○
A Microsoft Power BI dashboard can only display visualizations from a single dataset.	○	○
A Microsoft Power BY dashboard can display visualizations from a Microsoft Excel workbook.	○	○

Answer Area

Suggested Answer:

Statements	Yes	No
You can copy a dashboard between Microsoft Power BI workspaces.	○	●
A Microsoft Power BI dashboard can only display visualizations from a single dataset.	○	●
A Microsoft Power BY dashboard can display visualizations from a Microsoft Excel workbook.	●	○

Explanation:

Correct Answer:

Box 1: No -

You can duplicate a dashboard. The duplicate ends up in the same Power BI workspace.

There is no current functionality that allows you to move reports from one workspace to another.

Box 2: No -

Box 3: Yes –

Copy Dashboards (No):

"The new dashboard is saved in the same workspace as the original." (https://docs.microsoft.com/en-us/power-bi/create-reports/service-dashboard-copy)

Single dataset (No):

ONE dashboard...

- is associated with a single workspace

- can display visualizations from many different datasets

- can display visualizations from many different reports

- can display visualizations pinned from other tools (for example, Excel)

(https://docs.microsoft.com/en-us/power-bi/fundamentals/service-basic-concepts#dashboards)

Excel (Yes, see above)

Reference:

https://docs.microsoft.com/en-us/power-bi/connect-data/service-datasets-across-workspaces
https://docs.microsoft.com/en-us/power-bi/consumer/end-user-dashboardshttps://powerbi.microsoft.com/en-us/excel-and-power-bi/

Question 194   CertyIQ

What are three characteristics of an Online Transaction Processing (OLTP) workload? Each correct answer presents a complete solution. (Choose three.)

NOTE: Each correct selection is worth one point.

A. denormalized data

B. heavy writes and moderate reads

C. light writes and heavy reads

D. schema defined in a database

E. schema defined when reading unstructured data from a database

F. normalized data

Explanation:

Correct Answer: BDF

B: Transactional data tends to be heavy writes, moderate reads.

D: Typical traits of transactional data include: schema on write, strongly enforced. The schema is defined in a database.

F: Transactional data tends to be highly normalized.

Reference:

https://docs.microsoft.com/en-us/azure/architecture/data-guide/relational-data/online-transaction-processing

Question 195   CertyIQ

You manage an application that stores data in a shared folder on a Windows server.

You need to move the shared folder to Azure Storage.

Which type of Azure Storage should you use?

A. queue

B. blob

C. file

D. table

Explanation:

Correct Answer: C

Azure file shares can be mounted concurrently by cloud or on-premises deployments of Windows, Linux, and macOS. Azure file shares can also be cached on

Windows Servers with Azure File Sync for fast access near where the data is being used.

Reference:

https://azure.microsoft.com/en-us/services/storage/files/

Question 196   CertyIQ

Your company is designing a database that will contain session data for a website. The data will include notifications, personalization attributes, and products that are added to a shopping cart.

Which type of data store will provide the lowest latency to retrieve the data?

A. key/value

B. graph

C. columnar

D. document

Explanation:

Correct Answer: C

Column-family database is the low latency store type.

Examples

• Recommendations

• Personalization

• Sensor data

• Telemetry

• Messaging

• Social media analytics

• Web analytics

• Activity monitoring

• Weather and other time-series data

The diffirence is:

- Key/value: in order to modify a value (either partially or completely), an application must overwrite the existing data for the entire value

- Columnar: columns are divided into groups known as column families, and Within a column family, new columns can be added dynamically, and rows can be sparse SO take less time for modification.

The answer is correct, C - columnar

Question 197   CertyIQ

You have an application that runs on Windows and requires access to a mapped drive.

Which Azure service should you use?

A. Azure Files

B. Azure Blob storage

C. Azure Cosmos DB

D. Azure Table storage

Explanation:

Correct Answer: A

Azure Files is Microsoft's easy-to-use cloud file system. Azure file shares can be seamlessly used in Windows and Windows Server.

To use an Azure file share with Windows, you must either mount it, which means assigning it a drive letter or mount point path, or access it via its UNC path.

Reference:

https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-use-files-windows

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Question 198

HOTSPOT -
For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.
Hot Area:

Answer Area

Statements	Yes	No
The Azure Cosmos DB API is configured separately for each database in an Azure Cosmos DB account.	○	○
Partition keys are used in Azure Cosmos DB to optimize queries.	○	○
Items contained in the same Azure Cosmos DB logical partition can have different partition keys.	○	○

Answer Area

Suggested Answer:

Statements	Yes	No
The Azure Cosmos DB API is configured separately for each database in an Azure Cosmos DB account.	○	◉
Partition keys are used in Azure Cosmos DB to optimize queries.	◉	○
Items contained in the same Azure Cosmos DB logical partition can have different partition keys.	○	◉

Explanation:

Correct Answer:

Box 1: No -

The API determines the type of account to create. Azure Cosmos DB provides five APIs: Core (SQL) and MongoDB for document data, Gremlin for graph data,

Azure Table, and Cassandra. Currently, you must create a separate account for each API.

Box 2: Yes -

Azure Cosmos DB uses partitioning to scale individual containers in a database to meet the performance needs of your application. In partitioning, the items in a container are divided into distinct subsets called logical partitions. Logical partitions are formed based on the value of a partition key that is associated with each item in a container.

Box 3: No -

Logical partitions are formed based on the value of a partition key that is associated with each item in a container.

Reference:

https://docs.microsoft.com/en-us/azure/cosmos-db/partitioning-overview

Question 199   Certy**IQ**

Your company is designing an application that will write a high volume of JSON data and will have an application-defined schema.

Which type of data store should you use?

A. columnar

B. key/value

C. document

D. graph

Explanation:

Correct Answer: C

json files can define multiple keys and values, thus it is documents

Key/Value databases can not query json objects, you need to fully retrieve and then process...that means you have really litle query options, just a simple group by query will take longer than on a Document type database(the right answer)

Question 200   Certy**IQ**

You need to recommend a non-relational data store that is optimized for storing and retrieving text files, videos, audio streams, and virtual disk images. The data store must store data, some metadata, and a unique ID for each file.

Which type of data store should you recommend?

A. key/value

B. columnar

C. object

D. document

Correct Answer: C

Object storage is optimized for storing and retrieving large binary objects (images, files, video and audio streams, large application data objects and documents, virtual machine disk images). Large data files are also popularly used in this model, for example, delimiter file (CSV), parquet, and ORC. Object stores can manage extremely large amounts of unstructured data.

Reference:

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

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End of Part 5 🙂

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