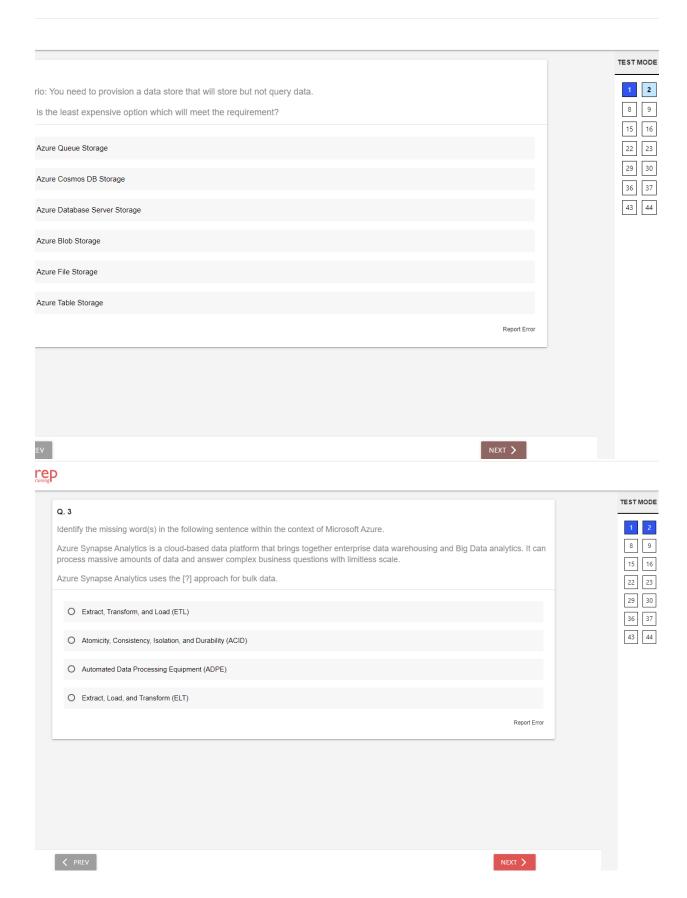
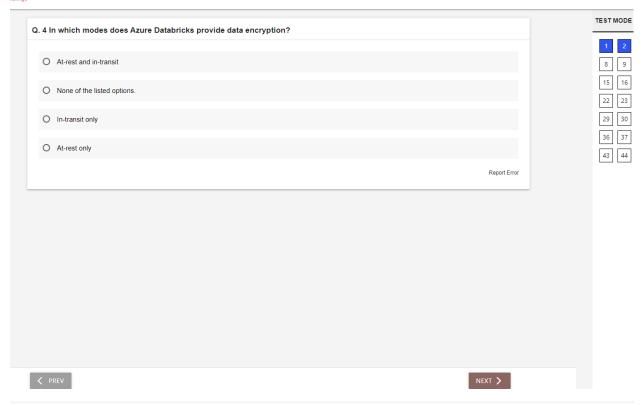
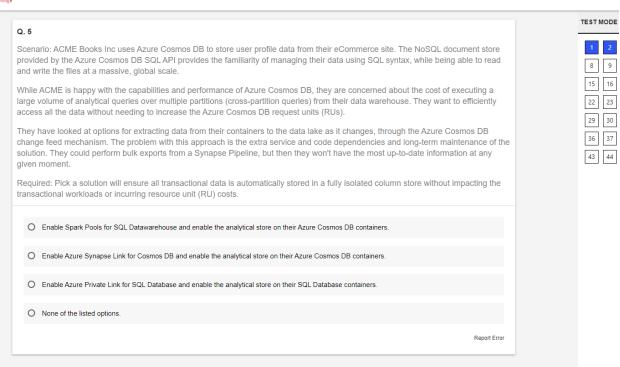
hich method for renaming a DataFrame column is incorrect?	TEST MODE
	1 2
df.select(col("timestamp").alias("dateCaptured"))	8 9
All are incorrect.	15 16
df.alias("timestamp", "dateCaptured")	22 23 29 30
All are correct.	36 37 43 44
df.toDF("dateCaptured")	
Report Error	
NEXT >	

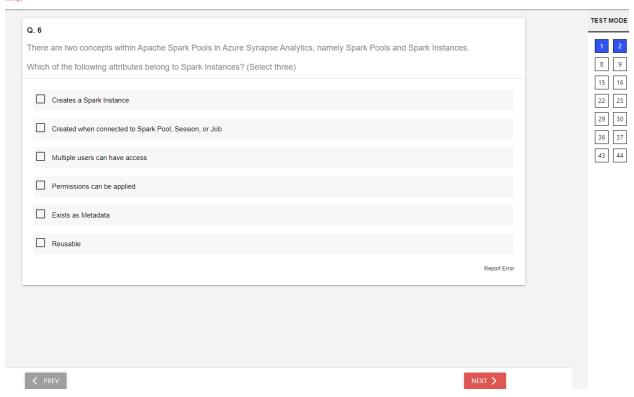














- · Permissions can be applied
- · Best practices

Spark Instances:

- Created when connected to Spark Pool, Session, or Job
- · Multiple users can have access
- Reusable

A Spark pool is created in the Azure portal. It is the definition of a Spark pool that, when instantiated, is used to create a Spark instance that processes data. When a Spark pool is created, it exists only as metadata; no resources are consumed, running, or charged for. A Spark pool has series of properties that control the characteristics of a Spark instance; these characteristics include but are not limited to name, size, scaling behaviour, time to live.

As there is no resource cost associated with creating Spark pools, any number of pools can be created with any number of different configurations. Permissions can also be applied to Spark pools allowing users only to have access to some and not others.

A best practice is to create smaller Spark pools that may be used for development and debugging and then larger ones for running production workloads.

An example of Spark Pools

- You create a Spark pool called SP1; it has a fixed cluster size of 20 nodes.
- You submit a notebook job, J1 that uses 10 nodes, a Spark instance, SI1 is created to process the job.
- You now submit another job, J2, that uses 10 nodes because there is still capacity in the pool and the instance, the J2, is processed by SI1.
- If J2 had asked for 11 nodes, there would not have been capacity in SP1 or SI1. In this case, if J2 comes from a notebook, then the job will be rejected; if J2 comes from a batch job, then it will be queued.

Spark instances are created when you connect to a Spark pool, create a session, and run a job. As multiple users may have access to a single Spark pool, a new Spark instance is created for each user that connects.

When you submit a second job, then if there is capacity in the pool, the existing Spark instance also has capacity then the existing instance will process the job; if not and there is capacity at the pool level, then a new Spark instance will be created.

An example of a Spark Instance:

- You create a Spark pool call SP2; it has an autoscale enabled 10 20 nodes
- · You submit a notebook job, J1 that uses 10 nodes, a Spark instance, SI1, is created to process the job.

< PREV

NEXT >

rep

A best practice is to create smaller Spark pools that may be used for development and debugging and then larger ones for running production workloads. An example of Spark Pools: • You create a Spark pool called SP1; it has a fixed cluster size of 20 nodes. • You submit a notebook job, J1 that uses 10 nodes, a Spark instance, SI1 is created to process the job. · You now submit another job, J2, that uses 10 nodes because there is still capacity in the pool and the instance, the J2, is processed by SI1. • If J2 had asked for 11 nodes, there would not have been capacity in SP1 or SI1. In this case, if J2 comes from a notebook, then the job will be rejected; if J2 comes from a batch job, then it will be gueued. Spark instances are created when you connect to a Spark pool, create a session, and run a job. As multiple users may have access to a single Spark pool, a new Spark instance is created for each user that connects. When you submit a second job, then if there is capacity in the pool, the existing Spark instance also has capacity then the existing instance will process the job: if not and there is capacity at the pool level, then a new Spark instance will be created. An example of a Spark Instance: • You create a Spark pool call SP2; it has an autoscale enabled 10 - 20 nodes • You submit a notebook job, J1 that uses 10 nodes, a Spark instance, SI1, is created to process the job. • You now submit another job, J2, that uses 10 nodes, because there is still capacity in the pool the instance auto grows to 20 nodes and processes J2. https://docs.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-concepts Permissions can be applied Exists as Metadata Reusable Report Error

TEST MODE :

TEST MODE :

36 37 3

1 2

8 9 1

22 23

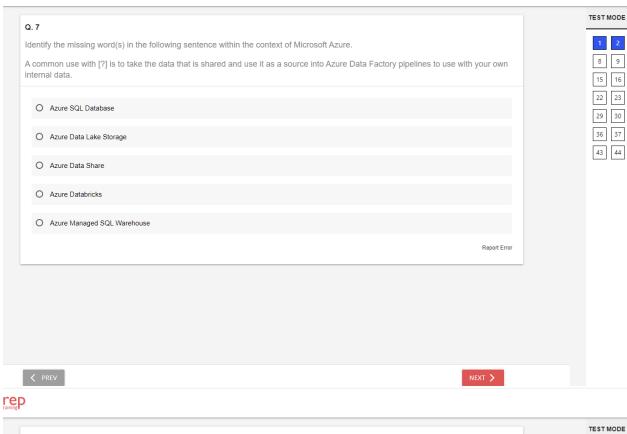
36 37

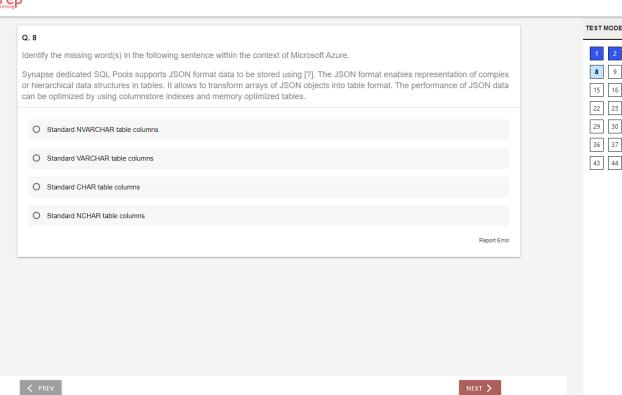
43 44 4

C PREV

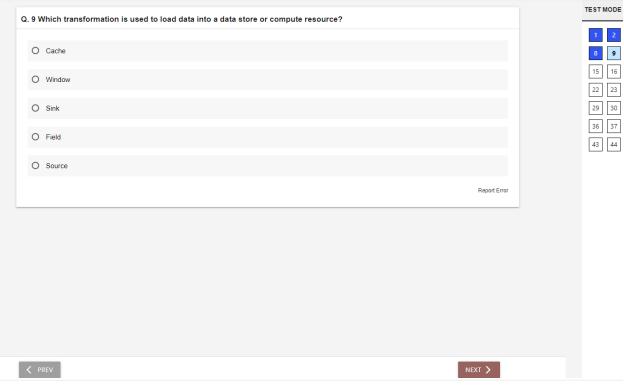
NEXT >



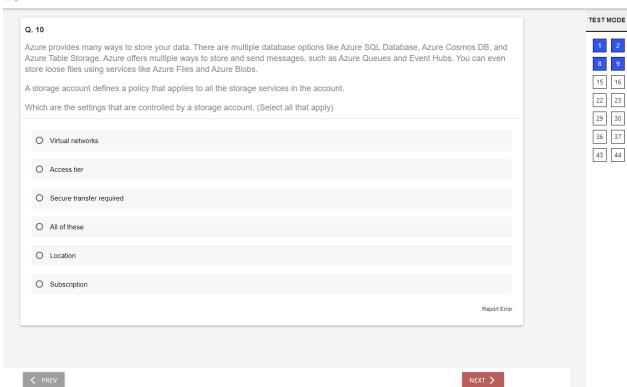




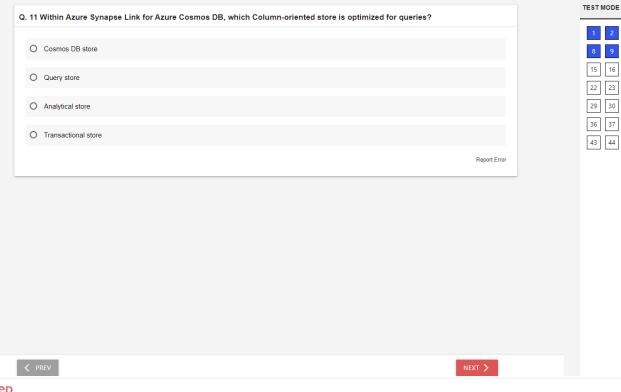




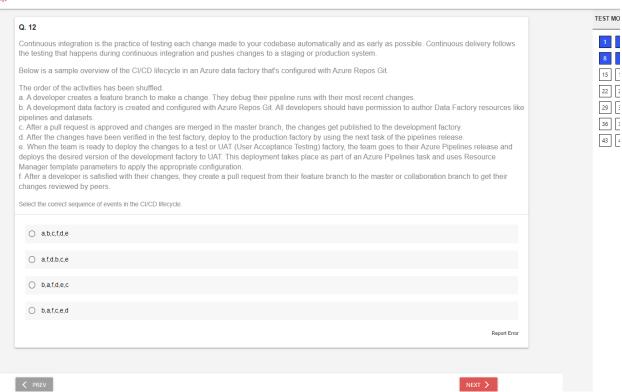




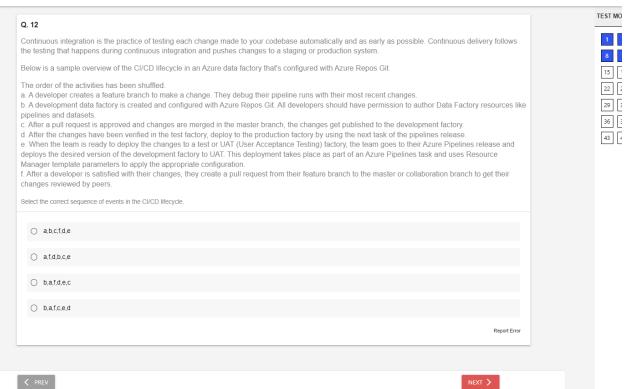




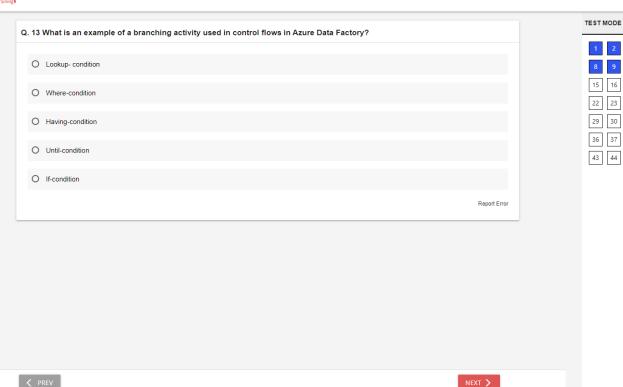




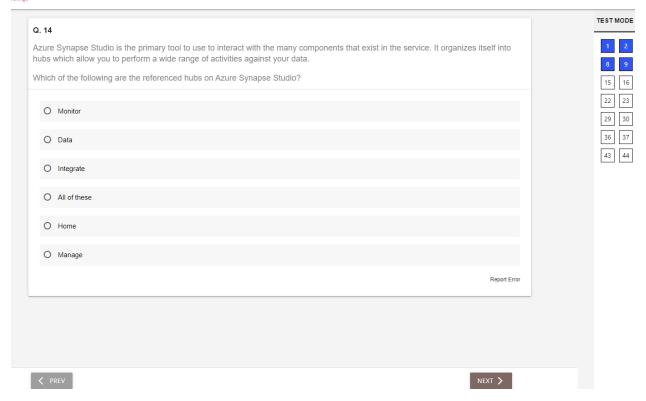


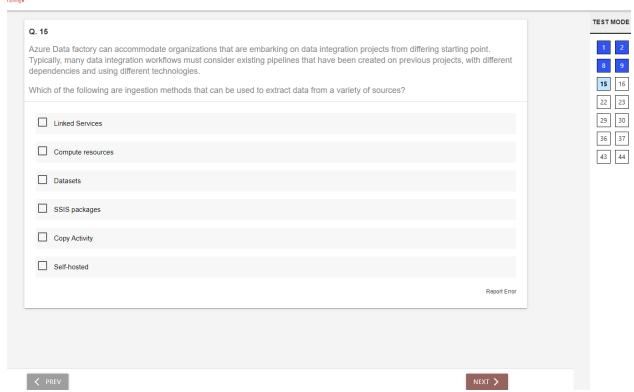














 17 Correct or Incorrect: Unique credential creation is always required whe ynapse SQL connector to enforce access control. 	en utilizing the Azure Synapse Apache Spark Pool to	TEST MC
ynapse SQL connector to enforce access control.		1
O Incorrect		8
		15
O Correct		22
	Report Error	29
		36
		43
✓ PREV	NEXT >	



Scenario: Pennyworth's Haberdashery is a clothing retailer based in London. The company has 2,000 retail stores across the EU and an emerging online presence. The network contains an Active Directory forest named pennyworths.com. The forest it integrated with an Azure Active Directory (Azure AD) tenant named pennyworths.com. Pennyworth's has an Azure subscription associated to the pennyworths.com Azure AD tenant.

Pennyworth's has three years of customer, transactional, operational, sourcing, and supplier data comprised of 10 billion records stored across multiple on-premises. Microsoft SQL Server servers. The SQL Server instances contain data from various operational systems. The data is loaded into the instances by using SQL Server Integration Services (SSIS) packages.

You have been hired as a consultant by Alfred Pennyworth to advise on very important projects within the company.

During your assessment of the IT environment, you estimate that combining all product sales transactions into a company-wide sales transactions dataset will result in a single table that contains 5 billion rows, with one row per transaction.

Most queries targeting the sales transactions data will be used to identify which products were sold in retail stores and which products were sold online during different time periods. Sales transaction data that is older than three years will be removed monthly.

The IT team plans to create a retail store table that will contain the address of each retail store. The table will be approximately 2 MB. Queries for retail store sales will include the retail store addresses.

They also plan to create a promotional table that will contain a promotion ID. The promotion ID will be associated to a specific product. The product will be identified by a product ID. The table will be approximately 5 GB.

The e-commerce department at Pennyworth's develops an Azure logic app that captures trending Twitter feeds referencing the company's products and pushes the products to Azure Event Hubs.

Planned Changes and Requirements

Pennyworth's plans to implement the following changes:

- Load the sales transaction dataset to Azure Synapse Analytics.
- Integrate on-premises data stores with Azure Synapse Analytics by using SSIS packages.

Sales Transaction Dataset Requirements

TEST MODE :

22 23 2

- · Use Azure Synapse Analytics to analyze Twitter feeds to assess customer sentiments about products.



Pennyworth's identifies the following requirements for the sales transaction dataset:

- Partition data that contains sales transaction records. Partitions must be designed to provide efficient loads by month. Boundary values must belong to the partition on the right.
- Ensure that queries joining and filtering sales transaction records based on product ID complete as quickly as possible.
- Implement a surrogate key to account for changes to the retail store addresses.
- Ensure that data storage costs and performance are predictable.
- · Minimize how long it takes to remove old records.

Customer Sentiment Analytics Requirements

Pennyworth's identifies the following requirements for customer sentiment analytics:

- Allow Pennyworth's users to use PolyBase in an Azure Synapse Analytics dedicated SQL pool to query the content of the data records that host the Twitter feeds.
- Data must be protected by using row-level security (RLS). The users must be authenticated by using their own Azure AD credentials.
- Maximize the throughput of ingesting Twitter feeds from Event Hubs to Azure Storage without purchasing additional throughput or capacity units.
- Store Twitter feeds in Azure Storage by using Event Hubs Capture. The feeds will be converted into Parquet files.
- Ensure that the data store supports Azure AD-based access control down to the object level.
- Minimize administrative effort to maintain the Twitter feed data records.
- · Purge Twitter feed data records that are older than two years.

Data Integration Requirements

Pennyworth's identifies the following requirements for data integration:

- Use an Azure service that leverages the existing SSIS packages to ingest on-premises data into datasets stored in a dedicated SQL pool of Azure Synapse Analytics and transform the data.
- Identify a process to ensure that changes to the ingestion and transformation activities can be version-controlled and developed independently by multiple data engineers.

The IT team has come up with a list of commands they are considering to execute which is shown below:

- a. CREATE EXTERNAL DATA SOURCE
- b. CREATE EXTERNAL FILE FORMAT
- c. CREATE EXTERNAL TABLE
- d. CREATE EXTERNAL TABLE AS SELECT
- e. CREATE DATABASE SCOPED CREDENTIAL

✓ PREV

NEXT >



Use an Azure service that leverages the existing SSIS packages to ingest on-premises data into datasets stored in a dedicated SQL pool of Azure Synapse Analytics and transform the data.
 Identify a process to ensure that changes to the ingestion and transformation activities can be version-controlled and developed

 Identify a process to ensure that changes to the ingestion and transformation activities can be version-controlled and develope independently by multiple data engineers.

The IT team has come up with a list of commands they are considering to execute which is shown below:

- a. CREATE EXTERNAL DATA SOURCE
- b. CREATE EXTERNAL FILE FORMAT
- c. CREATE EXTERNAL TABLE
- d. CREATE EXTERNAL TABLE AS SELECT
- e. CREATE DATABASE SCOPED CREDENTIAL

The Ask

Alfred places a great importance on this project and asks you to work closely with the team to ensure that the Twitter feed data can be analyzed in the dedicated SQL pool. The solution must meet the customer sentiment analytic requirements.

As the Azure expert, the team looks to you for direction with regards to the proper path forward.

Which Transact-SQL DDL commands should you recommend to be run in sequence?

O d,a,b,e

O a,b,d

O e,d,e,a,c

O c,d,a,e

Report Error

TEST MODE :

1 2

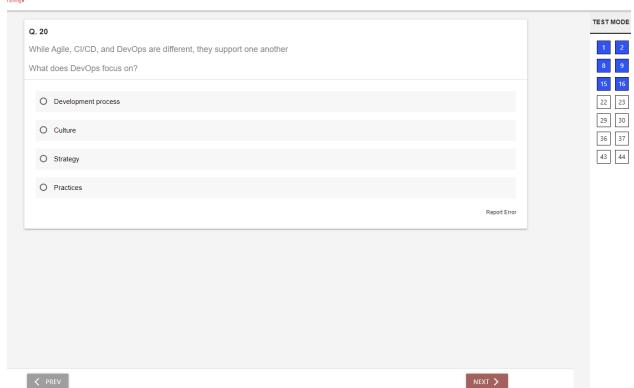
22 23 2

36 37 3

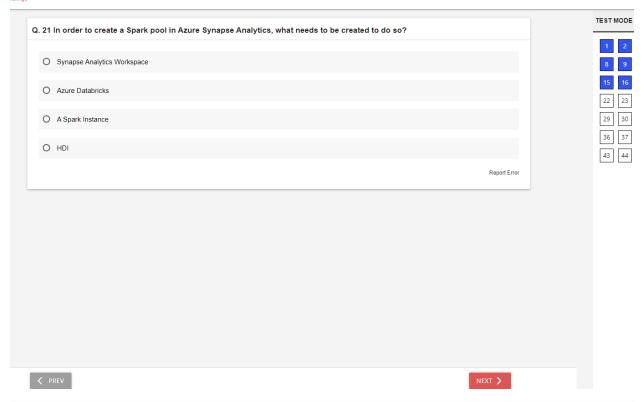
< PREV

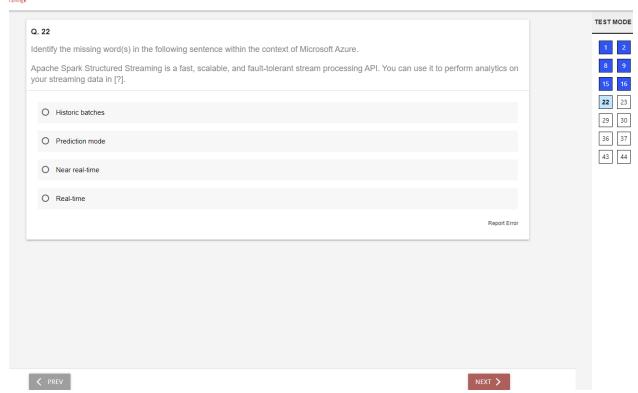


You can natively perform data transformations with Azure Data Factory code free using the Mapping Data Flow task. Mapping Data Flows provide a fully visual experience with no coding required. Your data flows will run on your own execution cluster for scaled-out data processing. Clicking Debug will provision the Spark clusters required to interact with the Mapping Data Flow transformations. If you select AutoResolveIntegrationRuntime, what will be the result? (Select all that apply) | It typically takes 5-7 minutes for the cluster to spin up. | A cluster with eight cores that will be available with a time to live value of 60 minutes. | The number of rows that are returned within the data previewer are fixed by the AutoResolve Agent. | None of the listed options. | Data engineers can develop data transformation logic with or without writing code. | All the listed options. | Report Error



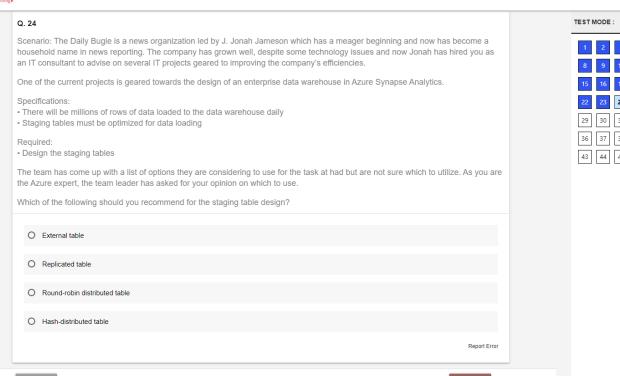








TEST MODE Q. 23 Scenario: You have been contracted by Wayne Enterprises, a company owned by Bruce Wayne with market value of over twenty seven million dollars. Bruce founded Wayne Enterprises shortly after he created the Wayne Foundation and he became the president and Bruce has come to you because his IT team needs advice on which API to use for the database model and type based on the following information. Specifications: • The application uses a NoSQL database to store data • The database uses the key-value and wide-column NoSQL database type. Required: Developers need to access data in the database using an API. Which of the following APIs should you recommend to Bruce and his team? ☐ MongoDB API Cassandra API SQLAPI ☐ Table API Gremlin API Report Error NEXT >





Q. 25	
Jsually when you see 'df' in some code it refers to a [?].	
I.Python	
2.new_rows =	
3.demo_df =	
O Dataflow	
O Datafeature	
O Dataformat	
0.5.4	
O Dateformat	
O Dataframe	
O Dataframe	
	Report Error
	•

prep

se a correctly formatted ConnectionString and create a database master key reate a database master key and configure the firewall to enable Azure services to connect	mewan to enable 72	Generate a OTF services to conn	
reate a database master key and configure the firewall to enable Azure services to connect		Use a correctly f) Use a
		Create a databa) Create
dd the client IP address to the firewall's allowed IP addresses list and use the correctly formatted ConnectionString	String	Add the client IP) Add th
Re	Report I		



O To represent a data st	tore or a compute resource that can host execution of an act	ivity.
To represent a proces	ssing step in a pipeline.	
To link data storage d	evices between on-prem and cloud environments.	
O To min data eterage a	onece services on premaine aloue entire annual mineral.	
O To link data stores or	computer resources together for the movement of data betw	een resources.
		Report Erro



Scenario: O'Shaughnessy's is a fast food restaurant. The chain has stores nationwide and is rivalled by Big Belly Burgers. You have been hired by the company to advise on working with Microsoft Azure Synapse Analytics.

At the moment, you are leading a meeting where the topic at hand is designing an enterprise data warehouse.

The IT team at O'Shaughnessy's is working on a project to design and create an enterprise data warehouse in Azure Synapse Analytics which will contain a table named Customers. Customers will contain credit card information.

Because security is critical to O'Shaughnessy's, they have asked you to recommend a solution to provide salespeople with the ability to view all the entries in Customers but prevent all the salespeople from viewing or inferring the credit card information.

Which of the following techniques should you propose in your recommendation?

Always Encrypted	
O Row-level security	
O Data masking	
O Column-level security	

Report Error



Scel	nario: While working on a project using Azure Data Factory, you are planning to load data into a data store	or
	pute resource.	, 01
√hi	ch transformation in Mapping Data Flow is used to do this?	
) Window	
) Cache	
) Source	
) Sink	
) Field mapping	
		Report Error



2. 30 Spark is a distributed computing en	vironment. Therefore, wo	ork is parallelized across ex	ecutors.
at which two levels does this parall	elization occur?		
The Executor and the Slot			
The Slot and the Task			
The Executor and the Task			
The Driver and the Executor			
			Report En



ann	"6°
	Q. 31
	Identify the missing word(s) in the following sentence within the context of Microsoft Azure.
	[?] is an encryption mechanism to help you protect Azure Synapse Analytics. It will protect Azure Synapse Analytics against threats of malicious offline activity. The [?] way will do so by is encrypting data at rest. [?] performs real-time encryption as well as decryption of the database, associated backups, and transaction log files at rest without you having to make changes to the application.
	O Table-level security
	O Column-level security
	O Row-level security
	O Database Encryption Key
	○ Transparent Data Encryption
	O Dynamic Data Masking
	Report Error



2. 32		
n the	provides many ways to store your data. A Storage account defines a policy that applies to all the storage service account. One of the settings within the Storage account is the Storage account kind, which is a set of policies the which data services you can include in the account and the pricing of those services.	
Which	of the following are valid kinds of Storage accounts? (Select three)	
	General Purpose v2	
	Block blobs Storage	
	Container Storage	
	General Purpose v1	
	Data Pool Storage	
	Blob Storage	
	Report E	rror



J .	33	
de	entif	fy the missing word(s) in the following sentence within the context of Microsoft Azure.
es	soui	Data Engineer, you can transfer and move data in several ways. The most common tool is [?], which provides robust rees and nearly 100 enterprise connectors. [?] also allows you to transform data by using a wide variety of ages.
	0	Azure Stream Analytics
	0	Azure Databricks
	0	Azure Data Lake Storage
	0	Azure Data Factory
	0	Azure Data Catalogue
		Report Error



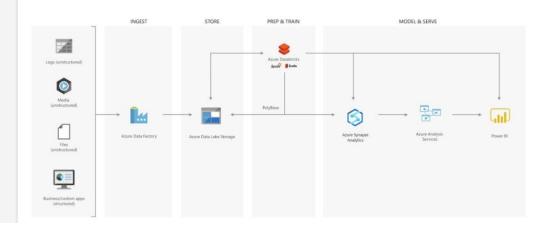
Q. 34

Scenario: Azure Data Lake Storage plays an important role in providing a large-scale data store. Your skills are needed by Hydra Corporation, which is a global seller of bicycles and cycling components through a chain of resellers and on the internet. As their customers browse the product catalogue on their websites and add items to their baskets, a recommendation engine that is built into Azure Databricks recommends other products.

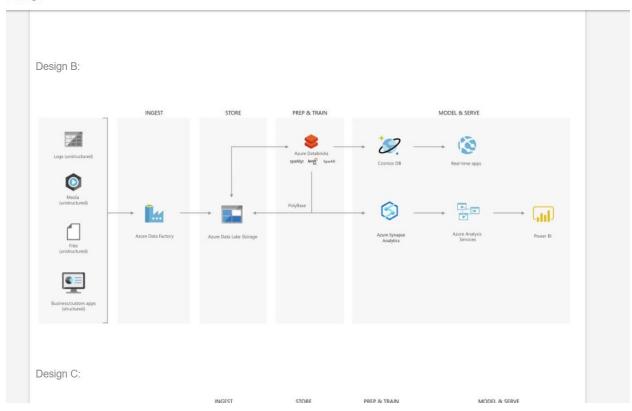
They need to make sure that the results of their recommendation engine can scale globally. The recommendations are based on the web log files that are stored on the web servers and transferred to the Azure Databricks model hourly. The response time for the recommendation should be less than 1 ms.

Review the following architecture designs.

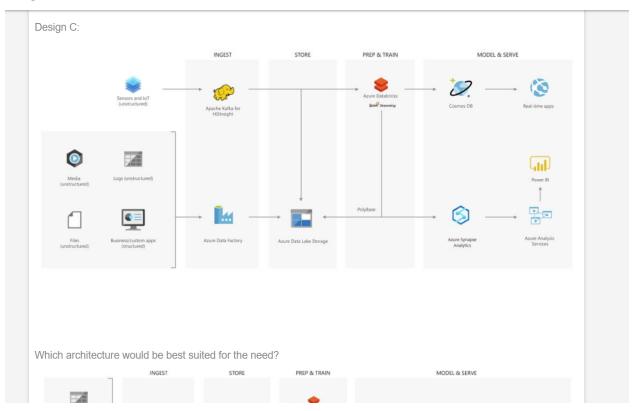
Design A:

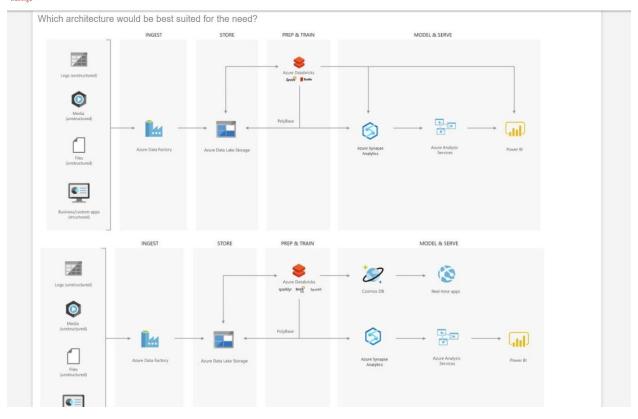


prep

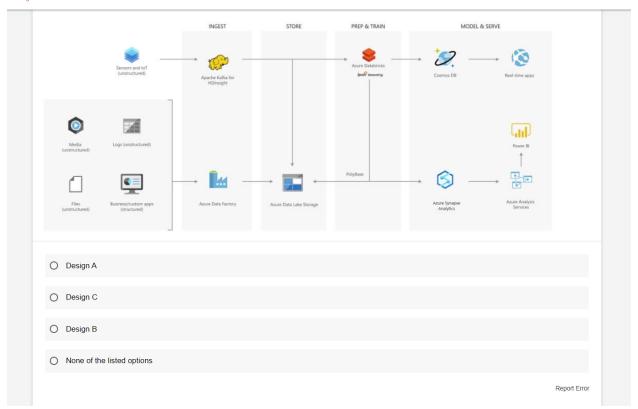


Prep







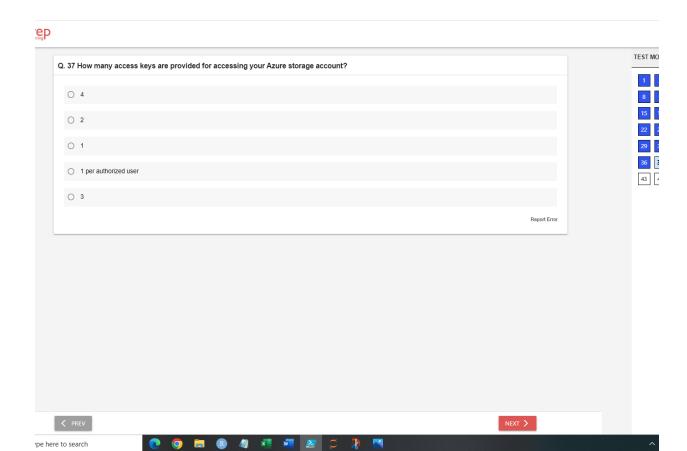


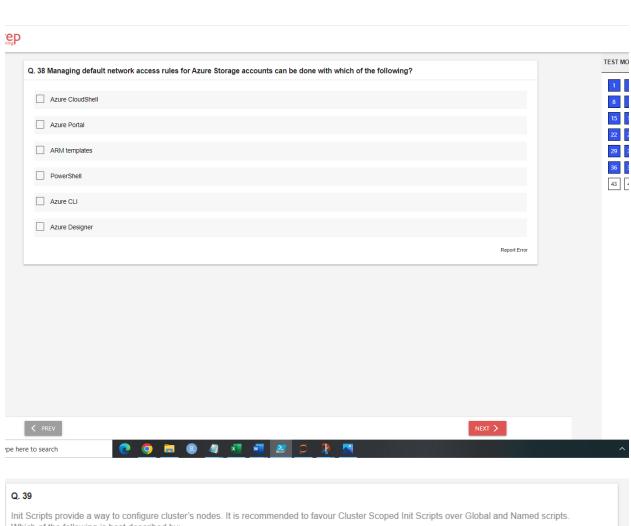


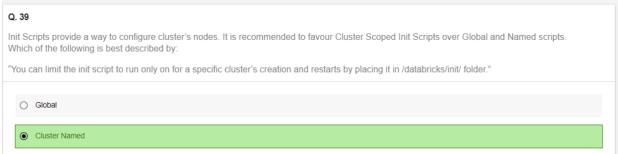
Q. 35	5
Ident	tify the missing word(s) in the following sentence within the context of Microsoft Azure.
visua	e Synapse Analytics is an integrated analytics platform, which combines data warehousing, big data analytics, data integration, and alization into a single environment. Azure Synapse Analytics empowers users of all abilities to gain access and quick insights across eir data, enabling a whole new level of performance and scale.
Desc	criptive analytics answers the question [?].
C) Why is it happening?
O) When will the modification made meet my goals?
O) What is happening in my business?
C) What is likely to happen in the future based on previous trends and patterns?"
	Report En



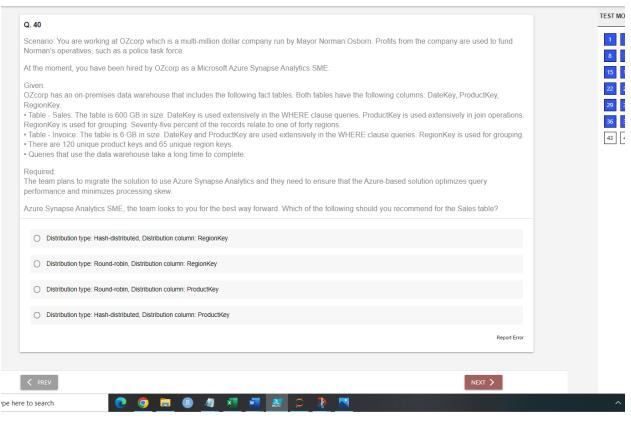
Any of the listed options are equally proficient to monitor spark pools Azure Monitor from the Azure Portal linked to your Azure Synapse Workspace Monitor tab in Azure Advisor linked to your Azure Synapse Workspace Monitor tab in Azure Synapse Studio within your Azure Synapse Workspace	
Monitor tab in Azure Advisor linked to your Azure Synapse Workspace	
Monitor tab in Azure Synapse Studio within your Azure Synapse Workspace	
	Report Erro



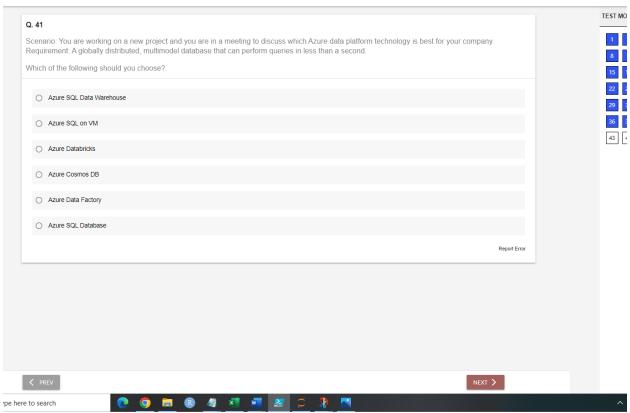


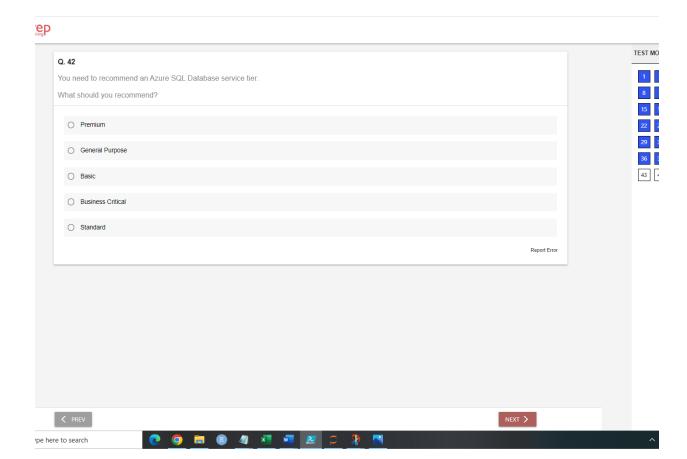


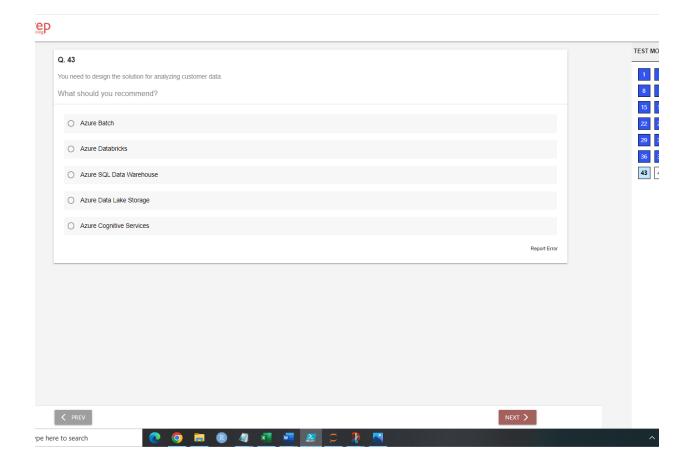


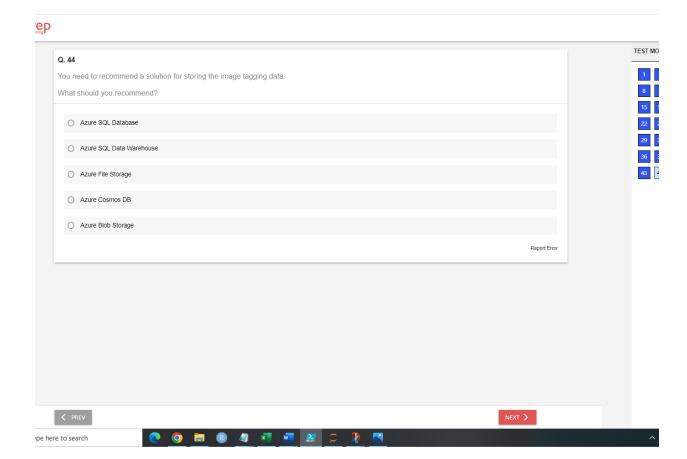


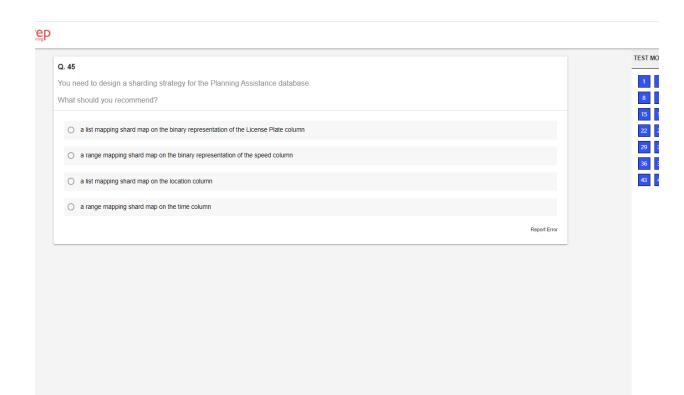












< PREV

pe here to search

