# Question1 Recommend an Azure Data solution based on requirements

Case Study

Complete the Case Study

* Solution Evaluation
* Question 1
* Question 2
* Question 3

**Instructions**  
  
This case study contains a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.  
  
Note: You cannot go back or review questions of this type on the actual certification exam.

## Question 1.1

Your company supports a software as a service (SaaS) application with a large number of customers. You are designing a support database to use elastic pools and elastic queries to retrieve customer information. Customer information is stored in a table that includes values for CustomerID and RegionalID.  
  
You need to partition data to optimize queries by customer sorted by geographic location. The solution should minimize support costs.  
  
You need to recommend a partitioning strategy.  
  
Solution: You configure horizontal partitioning based on CustomerID.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evaluation
* Question 1
* Question 2
* Question 3

No

Yes

## Question 1.2

Your company supports a software as a service (SaaS) application with a large number of customers. You are designing a support database to use elastic pools and elastic queries to retrieve customer information. Customer information is stored in a table that includes values for CustomerID and RegionalID.  
  
You need to partition data to optimize queries by customer sorted by geographic location. The solution should minimize support costs.  
  
You need to recommend a partitioning strategy.  
  
Solution: You configure vertical partitioning based on CustomerID.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evaluation
* Question 1
* Question 2
* Question 3

No

Yes

## Question 1.3

Your company supports a software as a service (SaaS) application with a large number of customers. You are designing a support database to use elastic pools and elastic queries to retrieve customer information. Customer information is stored in a table that includes values for CustomerID and RegionalID.  
  
You need to partition data to optimize queries by customer sorted by geographic location. The solution should minimize support costs.  
  
You need to recommend a partitioning strategy.  
  
Solution: You configure sharding by RegionalID.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evaluation
* Question 1
* Question 2
* Question 3

No

Yes

# Question7 Recommend an Azure Data solution based on requirements

Case Study

Complete the Case Study

* Solution Evalutation
* Question 1
* Question 2
* Question 3
* Question 4

**Instructions**  
  
This case study contains a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.  
  
Note: You cannot go back or review questions of this type on the actual certification exam.

## Question 7.1

You are a data architect for a grocery delivery company. The development team is building an app that allows grocery stores to delivery groceries. Individual grocery stores sell different types of grocery products. You want to implement a solution that does not restrict the product attributes that are used by each grocery store. You want to access product information by using OData queries.  
  
You need to create the appropriate data store.  
  
Solution: You create an Azure table.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evalutation
* Question 1
* Question 2
* Question 3
* Question 4

Yes

No

## Question 7.2

You are a data architect for a grocery delivery company. The development team is building an app that allows grocery stores to delivery groceries. Individual grocery stores sell different types of grocery products. You want to implement a solution that does not restrict the product attributes that are used by each grocery store. You want to access product information by using OData queries.  
  
You need to create the appropriate data store.  
  
Solution: You create an Azure Cosmos DB account with the Table API.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evalutation
* Question 1
* Question 2
* Question 3
* Question 4

No

Yes

## Question 7.3

You are a data architect for a grocery delivery company. The development team is building an app that allows grocery stores to delivery groceries. Individual grocery stores sell different types of grocery products. You want to implement a solution that does not restrict the product attributes that are used by each grocery store. You want to access product information by using OData queries.  
  
You need to create the appropriate data store.  
  
Solution: You create an Azure SQL Data Warehouse.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evalutation
* Question 1
* Question 2
* Question 3
* Question 4

No

Yes

## Question 7.4

You are a data architect for a grocery delivery company. The development team is building an app that allows grocery stores to delivery groceries. Individual grocery stores sell different types of grocery products. You want to implement a solution that does not restrict the product attributes that are used by each grocery store. You want to access product information by using OData queries.  
  
You need to create the appropriate data store.  
  
Solution: You create an Azure SQL Database.  
  
Does this solution meet the goal?

Complete the Case Study

* Solution Evalutation
* Question 1
* Question 2
* Question 3
* Question 4

Yes

No

# Question11 Recommend an Azure Data solution based on requirements

Case Study

Complete the Case Study

* Background

Company A is a merchant integration solutions company. The company works with website owners and merchants to enable merchants to advertise their products. The company has an existing on-premises solution that uses pools of servers and storage. You plan to develop a new cloud-based solution.

* Existing Process

Each merchant uploads product files to your company's FTP server over the weekend. A Windows service invokes merchant-specific components that process those files. Some merchants upload XML files, some upload CSV files, some upload JSON files, and some use proprietary file formats. Some of the files are over 1 petabyte.

* Technical Requirements

The conversion process must be moved to the cloud. Customers should be able to continue to send their files to the FTP server. However, another service should then move those files to Azure. Once the files are moved to Azure, parallel processes should transform the files from merchant-specific formats to a common relational format. The resulting data should be spread across compute nodes by vendor so that parallel queries can be run. There are 60 vendors.

* Product Table

The common relational format of the resulting Product table is defined as follows:

* Id: This field uniquely identifies a product. It is an alphanumeric string that has variable length, with a maximum of 20 characters.
* Price: This field represents the cost of one unit of the product. It is a currency value.
* Name: This field represents the name of a product. It is an alphanumeric string that has variable length, with a maximum of 60 characters.
* Description: This field describes the product. It is an alphanumeric string that has variable length, with a maximum of 200 characters.
* Vendor: This field represents the name of one of the 60 vendors.

The Product table will primarily be read-only during the week. The only time that it will be updated is on the weekend, when new files are retrieved. It is expected that only 10 percent of the table will change. The total number of rows is expected to be around one million.

* Vendor Table

The common relational format of the resulting Vendor table is defined as follows:

* Id: This field uniquely identifies a vendor. It is an alphanumeric string that has variable length, with a maximum of 20 characters.
* Name: This field represents the name of a product. It is an alphanumeric string that has variable length, with a maximum of 60 characters.

The Vendor table will be read-only all the time. It will be used in joins with the Product table. Reads against this table must be fast.

* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

## Question 11.1

You need to choose the service for copying product files from the FTP server to Azure.  
  
Which service should you use?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

Azure Databricks

Azure SQL Database

Azure Data Factory

Azure Data Migration Assistant

## Question 11.2

You need to choose the data store that serves as the destination when copying product files from the FTP server.  
  
Which data source should you choose?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

Azure SQL Database

Azure Data Warehouse

Azure Databricks

Azure Data Lake

## Question 11.3

You need to choose the data source for the final product data.  
  
Which data source should you choose?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

Azure SQL Data Warehouse

Azure Table

Azure Cosmos DB

Azure Databricks

## Question 11.4

You need to design the partition distribution scheme for the Product table.  
  
Which scheme should you use?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

Round-robin distribution with a clustered columnstore index

Replicated distribution with a non-clustered columnstore index

Round-robin distribution with a non-clustered columnstore index

Hash distribution with a clustered columnstore index

## Question 11.5

You need to design the partition distribution scheme for the Vendor table.  
  
Which scheme should you use?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

Replicated table with a clustered columnstore index

Round-robin distribution with a non-clustered columnstore index

Hash distribution with a non-clustered columnstore index

Round-robin distribution with a clustered columnstore index

## Question 11.6

You need to recommend a solution to implement the components that transform data from merchant-specific formats.  
  
What should you use?

Complete the Case Study

* Background
* Existing Process
* Technical Requirements
* Product Table
* Vendor Table
* Question 1
* Question 2
* Question 3
* Question 4
* Question 5
* Question 6

SQL Server Integration Services (SSIS)

PowerShell

Azure CLI

Polybase

# Question106 Recommend an Azure Data solution based on requirements

An in-house team is developing a new application. The design document specifies that data should be represented using nodes and relationships in graph structures. Individual data elements are relatively small.  
  
You need to recommend an appropriate data storage solution.  
  
Which solution should you recommend?

Choose the correct answer

Cosmos DB

HBase in HDInsight

Azure Data Lake Store

Azure Storage Blobs

# Question114 Recommend an Azure Data solution based on requirements

You are a data architect for your company. The development team is planning to develop an application that stores data as nodes in a graph.  
  
You need to choose the best data storage solution to meet this requirement.  
  
Which data storage should you use?

Choose the correct answer

Cosmos DB

Blob storage container

Azure Data Lake

Azure Table

# Question126 Recommend an Azure Data solution based on requirements

Your company has a large library of training videos that are currently stored on multiple on-premises file servers. You want to move the video files to cloud-based storage in a single data store to make is easier to support streaming video to offices in different locations.  
  
You need to recommend an appropriate storage solution. You want to minimize storage costs.  
  
What should you recommend?

Choose the correct answer

Azure Storage Blob

SQL Data Warehouse

Azure Cosmos DB

Azure File Storage

# Question149 Recommend an Azure Data solution based on requirements

You are designing an application that will use Azure SQL Database as its storage backend. The application extracts data from the database and generates text documents that should be made available to users through Storage Message Block (SMB) shares from a cloud-based location.  
  
You need to choose an appropriate cloud-based storage solution.  
  
Which data storage type should you choose?

Choose the correct answer

Azure Queues

Azure Files

Azure Blob

Azure Tables