AZ 204 Exam preparation notes

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www.stepbystepschools.net

➢ Azure step by step video: - https://youtu.be/wdUK7bCMXqs
➢ Azure az-900 fundamentals: - https://youtu.be/-eLXhPvkrp0
➢ Complete AZ-900 Course: - https://tinyurl.com/QPAZ900
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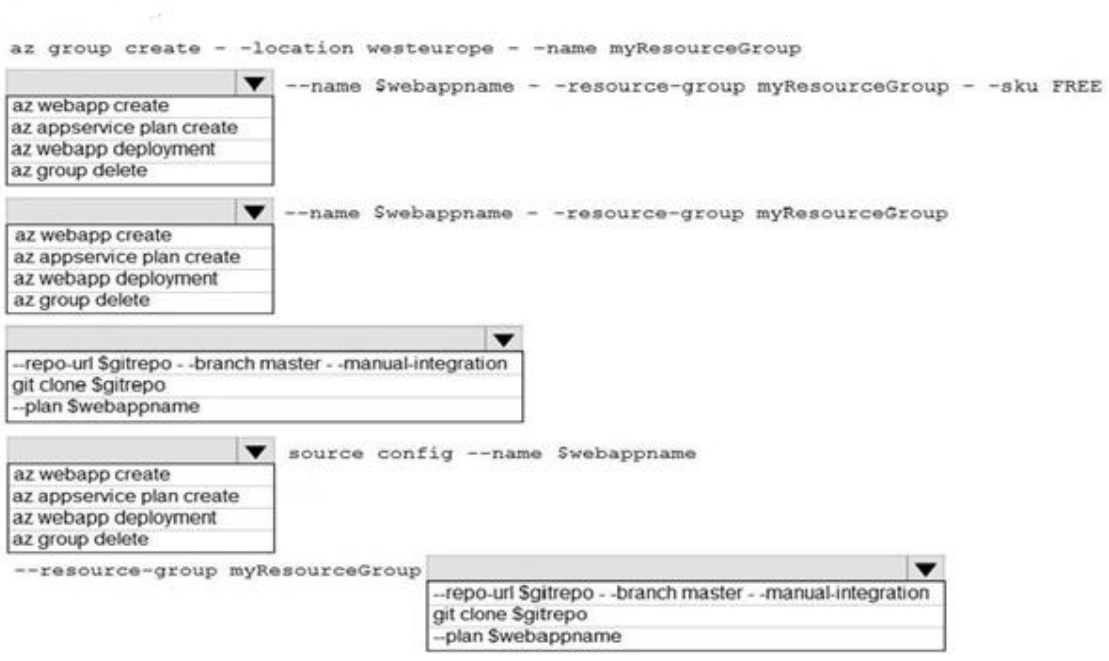
Contents

Question number 1 :- Devops Automation with github using Azure CLI

You are creating a CLI script that creates an Azure web app and related services in Azure App Service. The web app uses the following variables:

You need to automatically deploy code from Git-Hub to the newly created web app.
How should you complete the script? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.



Answer :-

az group create --location westeurope --name res123

az appservice plan create --name $webappname --resource-group res123 --sku FREE

az webapp create --name $webappname --resource-group res123 --plan $webappname

az webapp deployment source config --name $webappname --resource-group res123 --repo-url $gitrepo --branch master --git-token $token

echo http://$webappname.azurewebsites.net

Question number 2 :- Blob Storage photo processing

You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure

Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.

Solution: Convert the Azure Storage account to a BlockBlobStorage storage account.

Does the solution meet the goal?

A. Yes

B. No

Answer :- No

Question number 3 :- Blob Storage with events and photo processing

You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage.

The storage account type is General-purpose V2.

When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.

You need to design the process that starts the photo processing.

Solution: Trigger the photo processing from Blob storage events.

Does the solution meet the goal?

A. Yes
B. No

Answer Yes

Question number 5 :- App service plan settings and pricing tier

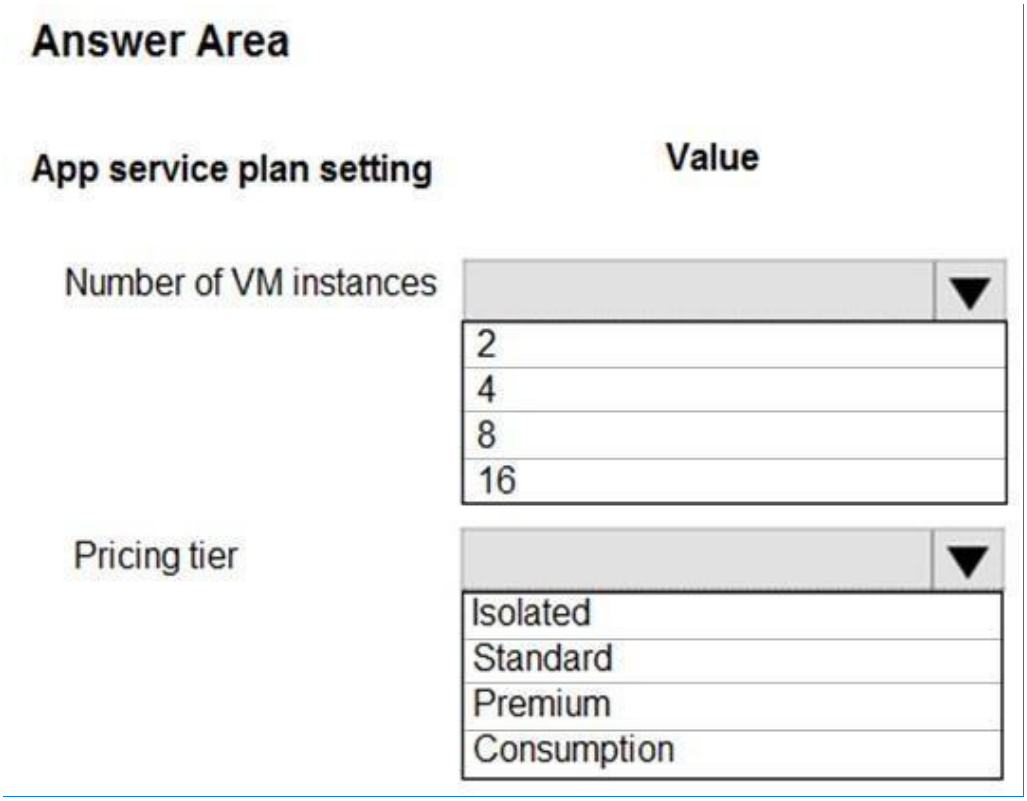
You are implementing a software as a service (SaaS) ASP.NET Core web service that will run as an Azure Web App.

The web service will use an on-premises SQL Server database for storage. The web service also includes a WebJob that processes data updates. Four customers will use the web service.

Each instance of the WebJob processes data for a single customer and must run as a singleton instance. Each deployment must be tested by using deployment slots prior to serving production data.

Azure costs must be minimized.

Azure resources must be located in an isolated network.You need to configure the App Service plan for the Web App.How should you configure the App Service plan?



Answer : 4 , ISOLATED

Question number 6 :- Azure blob and transaction logs.

You are developing an application that uses Azure Blob storage.
The application must read the transaction logs of all the changes that occur to the blobs and the blob metadata in the storage account for auditing purposes. The changes must be in the order in which they occurred, include only create, update, delete, and copy operations and be retained for compliance reasons.
You need to process the transaction logs asynchronously.

What should you do?

- **A.** Process all Azure Blob storage events by using Azure Event Grid with a subscriber Azure Function app.
- **B.** Enable the change feed on the storage account and process all changes for available events.
- **C.** Process all Azure Storage Analytics logs for successful blob events.
- **D.** Use the Azure Monitor HTTP Data Collector API and scan the request body for successful blob events.

Answer B

Question number 7 :- Azure service Bus Queues for FIFO and large size

You are developing an Azure Service application that processes queue data when it receives a message from a mobile application. Messages may not be sent to the service consistently.
You have the following requirements:

Queue size must not grow larger than 80 gigabytes (GB).

Use first-in-first-out (FIFO) ordering of messages. Minimize Azure costs.
You need to implement the messaging solution.

Solution: Use the .Net API to add a message to an Azure Service Bus Queue from the mobile application. Create an Azure Windows VM that is triggered from Azure Service Bus Queue.

Does the solution meet the goal?
A. Yes
B. No

Answer NO.

Tweek of the above question

You are developing an Azure Service application that processes queue data when it receives a message from a mobile application. Messages may not be sent to the service consistently.

You have the following requirements:

- • Queue size must not grow larger than 80 gigabytes (GB).
  • Use first-in-first-out (FIFO) ordering of messages.
  • Minimize Azure costs.
- You need to implement the messaging solution.
- Solution: Use the .Net API to add a message to an Azure Service Bus Queue from the mobile application. Create an Azure Function App that uses an Azure Service Bus Queue trigger.
- Does the solution meet the goal?
- A. Yes
- B. No

Answer Yes

Shipping case study

There is a shipping application with the following details :-

- Windows Server 2016 virtual machine :- The virtual machine (VM) runs BizTalk Server 2016. The VM runs the following workflows:
  Ocean Transport “” This workflow gathers and validates container information including container contents and arrival notices at various shipping ports.
  Inland Transport “” This workflow gathers and validates trucking information including fuel usage, number of stops, and routes.

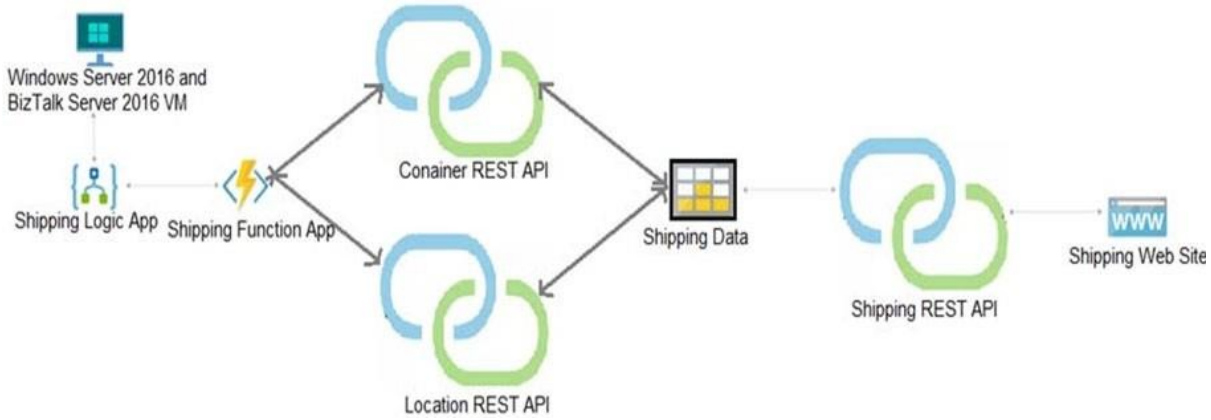
The VM supports the following REST API calls:
Container API “” This API provides container information including weight, contents, and other attributes.
Location API “” This API provides location information regarding shipping ports of call and tracking stops.
Shipping REST API “” This API provides shipping information for use and display on the shipping website.

- Shipping Data -
  The application uses MongoDB JSON document storage database for all container and transport information.
- Shipping Web Site -
  The site displays shipping container tracking information and container contents. The site is located at http://shipping.wideworldimporters.com/

- Proposed solution -
  The on-premises shipping application must be moved to Azure. The VM has been migrated to a new Standard_D16s_v3 Azure VM by using Azure Site Recovery and must remain running in Azure to complete the BizTalk component migrations. You create a Standard_D16s_v3 Azure VM to host BizTalk Server. The Azure architecture diagram for the proposed solution is shown below:
- Requirements -
- Shipping Logic app -
  The Shipping Logic app must meet the following requirements:
  Support the ocean transport and inland transport workflows by using a Logic App.
  Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
  Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
  Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.
- Shipping Function app -
  Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).
- REST APIs -
  The REST API's that support the solution must meet the following requirements:
  Secure resources to the corporate VNet.
  Allow deployment to a testing location within Azure while not incurring additional costs.
  Automatically scale to double capacity during peak shipping times while not causing application downtime.
  Minimize costs when selecting an Azure payment model.
- Shipping data -
  Data migration from on-premises to Azure must minimize costs and downtime.
- Shipping website -
  Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.
- Issues -
- Windows Server 2016 VM -
  The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.

- Windows Server 2016 VM -
  The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.
- Shipping website and REST APIs -
  The following error message displays while you are testing the website:
  Failed to load http://test-shippingapi.wideworl... No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access.
-

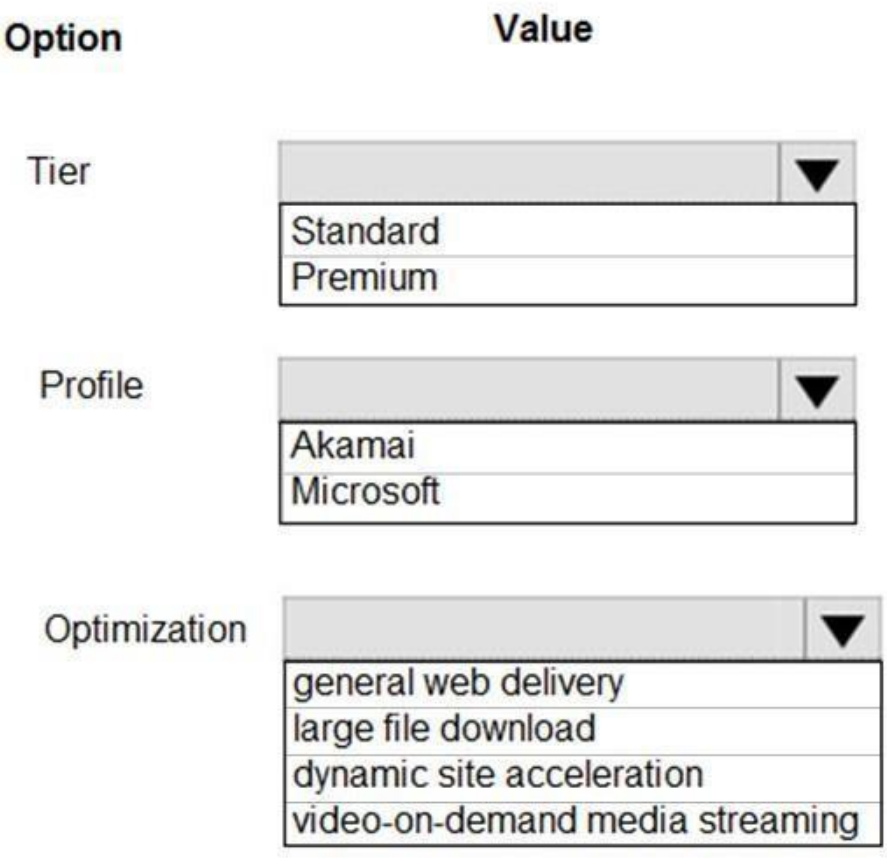
Questions are following now



Question number 8 :- Shipping case study – Azure CDN

You need to configure Azure CDN for the Shipping web site.
Which configuration options should you use? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point

Answer Area

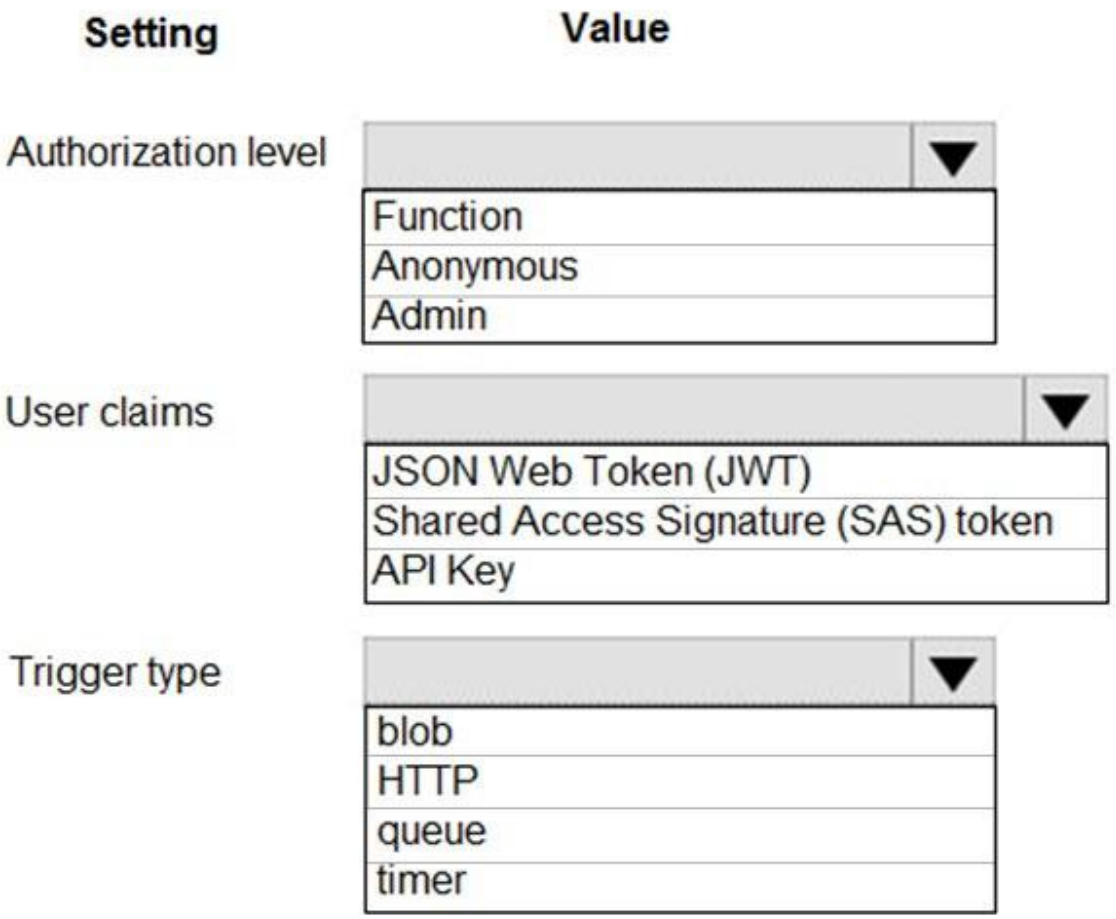


Answer :- Standard , Akamai and Dynamic site acceleration.

Question number 9 :- Shipping case study function app security

You need to secure the Shipping Function app.How should you configure the app? To answer, select the appropriate options in the answer area.

Answer Area



Answer :- Function , JSON and HTTP

Question number 10 :- Azure COSMOS DB Consistencies

- You are developing a ticket reservation system for an airline.
  The storage solution for the application must meet the following requirements:
- Ensure at least 99.99% availability and provide low latency.
- Accept reservations event when localized network outages or other unforeseen failures occur.

- Process reservations in the exact sequence as reservations are submitted to minimize overbooking or selling the same seat to multiple travelers.
- Allow simultaneous and out-of-order reservations with a maximum five-second tolerance window.
- You provision a resource group named airlineResourceGroup in the Azure South-Central US region.
  You need to provision a SQL SPI Cosmos DB account to support the app.
  How should you complete the Azure CLI commands? To answer, select the appropriate options in the answer area.
  NOTE: Each correct selection is worth one point.

Answer Area

```
resourceGroupName- +airlineResourceGroup'
name- +docdb-airline-reservations'
databaseName- 'docdb-tickets-database'
collectionName- 'docdb-tickets-collection'
consistencyLevel-
```

- Strong
- Eventual
- ConsistentPrefix
- BoundedStaleness

```
az cosmosdb create \
--name $name \
```

- --enable-virtual-network true\
- --enable-automatic-failover true\
- --kind 'GlobalDocumentDB' \
- --kind 'MongoDB'\

```
--resource group $resourceGroupName \
--max interval 5 \
```

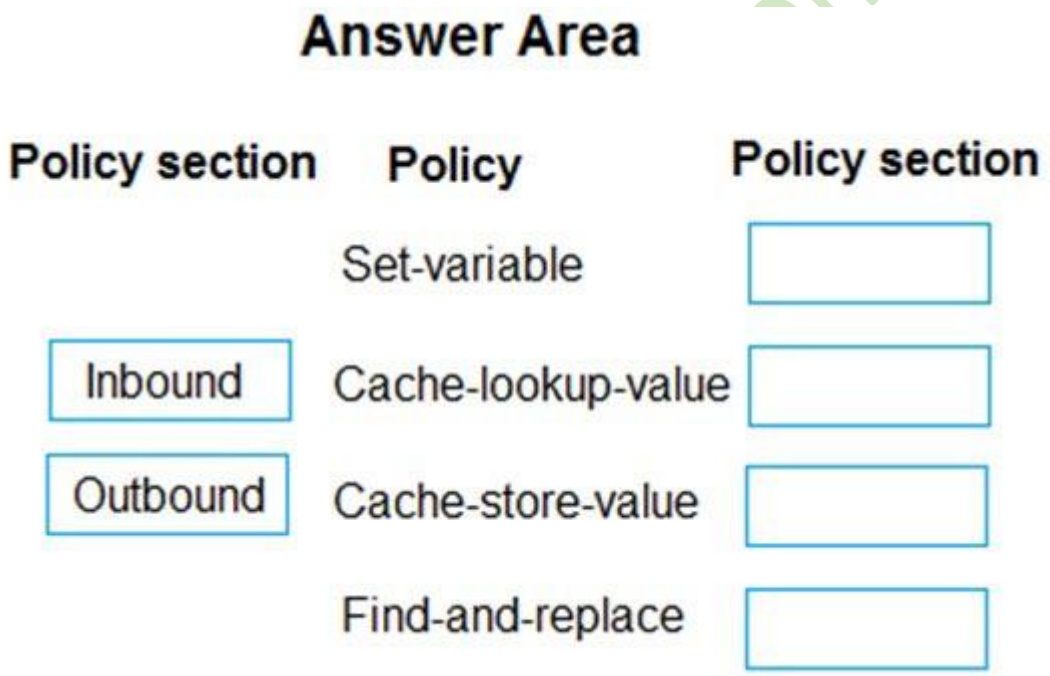
- --locations 'southcentralus'
- --locations 'eastus'
- --locations'southcentralus=0 eastus=1 westus=2'
- --locations 'southcentralus=0'

```
--default-consistency-level - $consistencylevel
```

Answer :- 1. Strong 2. --enable-automatic-failover true\ 3. --locations'southcentralus'

Question number 11:- APIM Caching as per key

- You must implement response caching for the APIM gateway. The caching mechanism must detect the user ID of the client that accesses data for a given location and cache the response for that user ID.
- You need to add the following policies to the policies file:
- ☞ a set-variable policy to store the detected user identity
- ☞ a cache-lookup-value policy
- ☞ a cache-store-value policy
- a find-and-replace policy to update the response body with the user profile information
- To which policy section should you add the policies?.
- Select and Place:



- - Set-variable (store the detected user identity): Inbound
- - Cache-lookup-value (perform cache lookup by key and return a cached value): Inbound
- - Cache-store-value (caches responses according to the specified cache settings): Inbound
- - Find-and-Replace (update the response body with the user profile information): Outbound

Question number 12 :- Azure AD and Managed identities

- Your company is developing an Azure API.You need to implement authentication for the Azure API. You have the following requirements:
- All API calls must be secure.
- Callers to the API must not send credentials to the API.
- Which authentication mechanism should you use?
- A. Basic
- B. Anonymous
- C. Managed identity
- D. Client certificate

Answer :- Managed identity

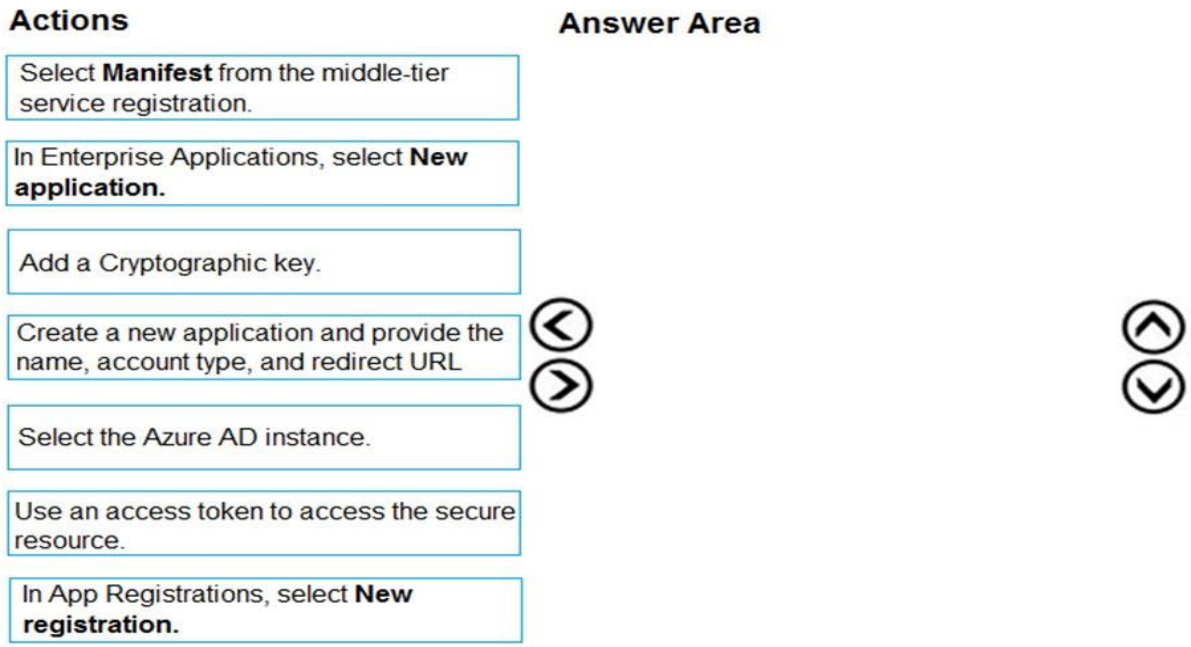
Question number 13 :- OpenID using Azure AD

- You are a developer for a SaaS company that offers many web services.
- All web services for the company must meet the following requirements:
- Use API Management to access the services
- Use OpenID Connect for authentication
- Prevent anonymous usage -
- A recent security audit found that several web services can be called without any authentication.
- Which API Management policy should you implement?
- A. jsonp
- B. authentication-certificate
- C. check-header
- D. validate-jwt

Answer :- D

Question number 14 :- Security web app using Azure AD

- You develop a web application.You need to register the application with an active Azure Active Directory (Azure AD) tenant.
- Which three actions should you perform in sequence? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.



Answer :- Select the Azure AD instance =>
In App Registration, select new registration
Create a new application and provide the name, account type, and redirect URL.

Question number 15 :- Azure AD Multifactory

You have a new Azure subscription. You are developing an internal website for employees to view sensitive data. The website uses Azure Active Directory (AzureAD) for authentication.

You need to implement multifactor authentication for the website.

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

- A. Configure the website to use Azure AD B2C.
- B. In Azure AD, create a new conditional access policy.
- C. Upgrade to Azure AD Premium.
- D. In Azure AD, enable application proxy.
- E. In Azure AD conditional access, enable the baseline policy.

Answer :- B and C

Question number 16 :- Telementry and Application insight

You are developing an ASP.NET Core Web API web service. The web service uses Azure Application Insights for all telemetry and dependency tracking. The web service reads and writes data to a database other than Microsoft SQL Server.

You need to ensure that dependency tracking works for calls to the third-party database.

Which two dependency telemetry properties should you use? Each correct answer presents part of the solution.

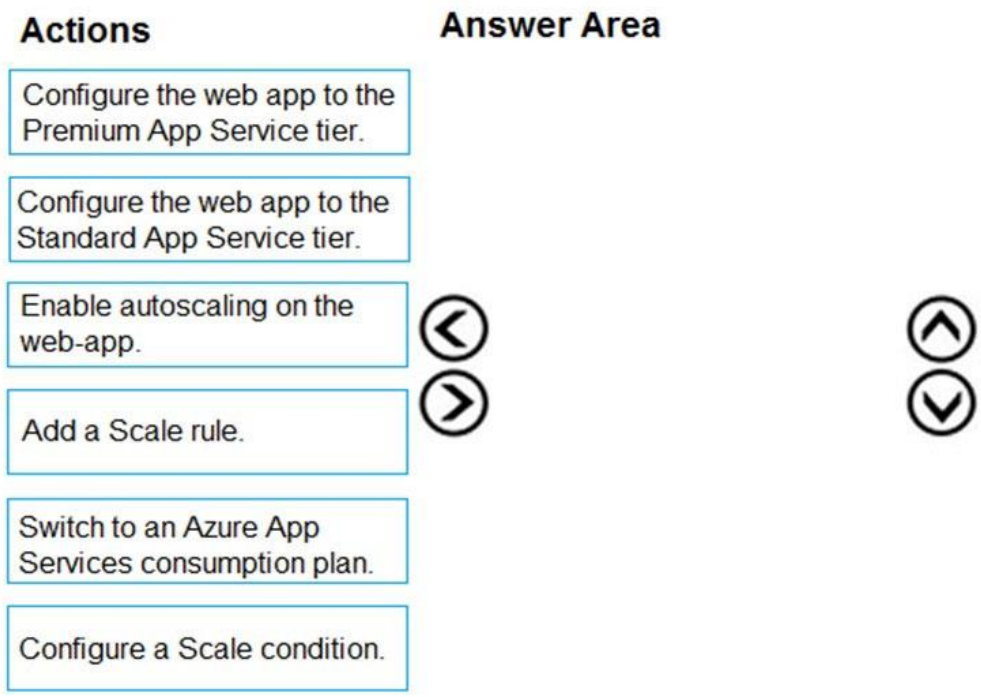
- A. Telemetry.Context.Cloud.RoleInstance
- B. Telemetry.Id
- C. Telemetry.Name
- D. Telemetry.Context.Operation.Id
- E. Telemetry.Context.Session.Id

Answer B and D

Question number 17 :- Autoscaling of App services

You develop a web app that uses tier D1 app service plan by using the Web Apps feature of Microsoft Azure App Service. Spikes in traffic have caused increases in page load times.

You need to ensure that the web app automatically scales when CPU load is about 85 percent and minimize costs. Which four actions should you perform in sequence?



Step 1: Configure the web app to the Standard App Service Tier.The Standard tier supports auto-scaling, and we should minimize the cost.
Step 2: Enable autoscaling on the web app.
Step 3: Add a scale rule -
Step 4: Add a Scale condition -
Reference:
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-autoscale-get-started
Connect to and consume Azure services and third-party services

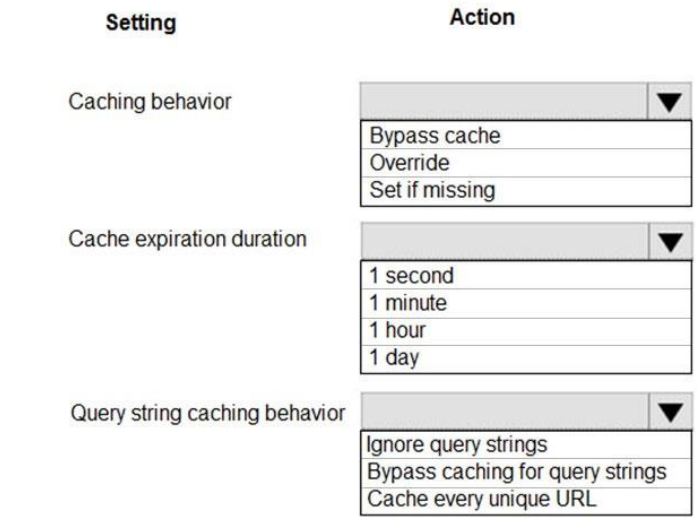
Question number 18 :- Azure CDN expiry using URL

You are developing an Azure App Service hosted ASP.NET Core web app to deliver video on-demand streaming media. You enable an Azure Content Delivery

Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL.: http://www.contoso.com/ content.mp4?quality=1

All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence
(POP) node.
You need to configure Azure CDN caching rules.

Answer Area



Box 1: Override -
Override: Ignore origin-provided cache duration; use the provided cache duration instead. This will not override cache-control: no-cache.
Set if missing: Honor origin-provided cache-directive headers, if they exist; otherwise, use the provided cache duration.
Incorrect:
Bypass cache: Do not cache and ignore origin-provided cache-directive headers.

Box 2: 1 hour -
All media content must expire from the cache after one hour.

Box 3: Cache every unique URL -
Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache. For example, the response from the origin server for a request for example.ashx?q=test1 is cached at the POP node and returned for subsequent caches with the same query string. A request for example.ashx?q=test2 is cached as a separate asset with its own time-to-live setting.
Incorrect Answers:
Bypass caching for query strings: In this mode, requests with query strings are not cached at the CDN POP node. The POP node retrieves the asset directly from the origin server and passes it to the requestor with each request.
Ignore query strings: Default mode. In this mode, the CDN point-of-presence (POP) node passes the query strings from the requestor to the origin server on the first request and caches the asset. All subsequent requests for the asset that are served from the POP ignore the query strings until the cached asset expires.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-query-string

Question number 19 :- Azure Front door service and compression

You are using Azure Front Door Service. You are expecting inbound files to be compressed by using Brotli compression. You discover that inbound XML files are not compressed. The files are 9 megabytes (MB) in size.You need to determine the root cause for the issue.

To answer, select the appropriate options in the answer area.

Answer Area

Statement	Yes	No
The file MIME type is supported by the service.	○	○
Edge nodes must be purged of all cache assets.	○	○
The compression type is supported.	○	○

Answer :-

Box 1: No -
Front Door can dynamically compress content on the edge, resulting in a smaller and faster response to your clients. All files are eligible for compression.
However, a file must be of a MIME type that is eligible for compression list.

Box 2: No -
Sometimes you may wish to purge cached content from all edge nodes and force them all to retrieve new updated assets. This might be due to updates to your web application, or to quickly update assets that contain incorrect information.

Box 3: Yes -
These profiles support the following compression encodings: Gzip (GNU zip), Brotli

Reference: https://docs.microsoft.com/en-us/azure/frontdoor/front-door-caching

Question number 20 :- Azure Queue PeekMessage and GetMessage

You are developing an application that uses Azure Storage Queues.

```
CloudStorageAccount acc = CloudStorageAccount.Parse("");
CloudQueueClient queueclient = acc.CreateCloudQueueClient();
CloudQueue que1 = queueclient.GetQueueReference("myqueue123");
que1.CreateIfNotExists();
CloudQueueMessage peekmessage = que1.PeekMessage();

if(peekmessage != null)
{
Console.WriteLine(peekmessage.ToString());
}
CloudQueueMessage mess = que1.GetMessage();

Console.Read();
```

- The code configures the lock duration for the queue.FALSE
- The last message read remains in the queue after the code runs. TRUE
- The storage queue remains in the storage account after the code runs. FALSE

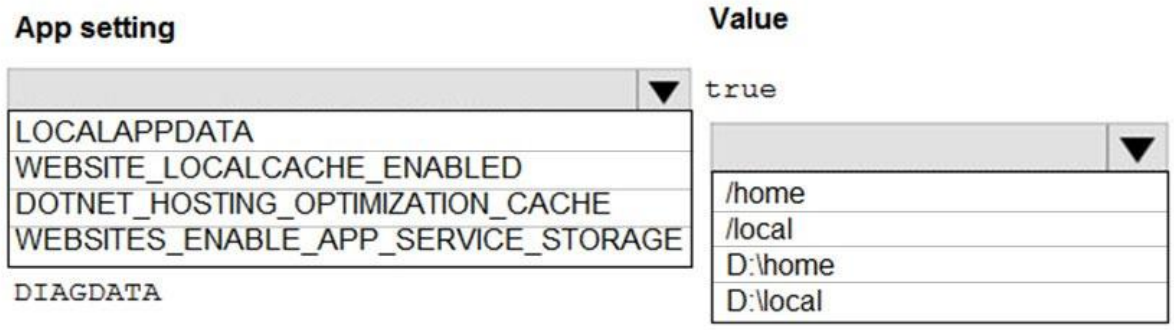
Question number 21 :- Retain information across restart.

You are developing an ASP.NET Core web application. You plan to deploy the application to Azure Web App for Containers.
The application needs to store runtime diagnostic data that must be persisted across application restarts. You have the following code:

```
public void SaveDiagData(string data)
{
      var path = Environment.GetEnvironmentVariable("DIAGDATA")
      File.WriteAllText(Path.Combine(path, "data"), data);
}
```

You need to configure the application settings so that diagnostic data is stored as required.
How should you configure the web app's settings? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area



https://docs.microsoft.com/en-us/azure/app-service/faq-app-service-linux

Question number 22 :- Azure key vault and power shell commands

You are developing an application. You have an Azure user account that has access to two subscriptions.
You need to retrieve a storage account key secret from Azure Key Vault.
In which order should you arrange the PowerShell commands to develop the solution? To answer, move all commands from the list of commands to the answer area and arrange them in the correct order.

Powershell commands

```
$secretvalue = ConvertTo-SecureString
$storAcctkey -AsPlainText
-Force
     Set-AzKeyVaultSecret -VaultName
$vaultName -Name $secretName
-SecretValue $secretvalue
```

```
Get-AzStorageAccountKey -
ResourceGroupName $resGroup -Name
$storAcct
```

```
Set-AzContext -SubscriptionId
$subscriptionID
```

```
Get-AzKeyVaultSecret -VaultName
$vaultName
```

```
Get-AzSubscription
```

Answer Area

Step 1: Get-AzSubscription -
If you have multiple subscriptions, you might have to specify the one that was used to create your key vault. Enter the following to see the subscriptions for your account:

Get-AzSubscription -
Step 2: Set-AzContext -SubscriptionId
To specify the subscription that's associated with the key vault you'll be logging, enter:
Set-AzContext -SubscriptionId <subscriptionID>

Step 3: Get-AzStorageAccountKey -
You must get that storage account key.
Step 4: $secretvalue = ConvertTo-SecureString <storageAccountKey> -AsPlainText -Force
Set-AzKeyVaultSecret -VaultName <vaultName> -Name <secretName> -SecretValue $secretvalue
After retrieving your secret (in this case, your storage account key), you must convert that key to a secure string, and then create a secret with that value in your key vault.

Step 5: Get-AzKeyVaultSecret -
Next, get the URI for the secret you created. You'll need this URI in a later step to call the key vault and retrieve your secret. Run the following PowerShell command and make note of the ID value, which is the secret's URI:
Get-AzKeyVaultSecret ""VaultName <vaultName>

Reference:
https://docs.microsoft.com/bs-latn-ba/Azure/key-vault/key-vault-key-rotation-log-monitoring
Monitor, troubleshoot, and optimize Azure solutions

Question number 24 :- Azure Queues , Events and Service Bus.

Question number 25 :- Making Azure Queues publisher and subscriber.

You are using Azure Queues where a .NET application is pushing queue message and Another .NET application is reading from that the queue. Once the message is read the queue gets deleted.
Recently there is demand that the message should be sent to more subscribers. What can be better fit?

- Read from Azure Queues and dump in to Blob from where subscribers can read.
- For every subscriber create azure queue and dump message in all queues.
- Use Azure Event HUB and create publisher and subscriber model.
- **User Azure service bus and create topics.**

Question number 26 :- Azure Event HUB and partitions

You are building a traffic monitoring system that monitors traffic along six highways. The system produces time series analysis-based reports for each highway.
Data from traffic sensors are stored in Azure Event Hub.
Traffic data is consumed by four departments. Each department has an Azure Web App that displays the time series-based reports and contains a WebJob that processes the incoming data from Event Hub. All Web Apps run on App Service Plans with three instances.
Data throughput must be maximized. Latency must be minimized.

You need to implement the Azure Event Hub.

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

Answer Area

Setting	Value
Number of partitions	3 / 4 / 6 / 12
Partition Key	Highway / Department / Timestamp / VM name

https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features

https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-dotnet-standard-getstarted-send

Highway and 6

Question number 27 :- Azure Batch Process question

You have an Azure Batch project that processes and converts files and stores the files in Azure storage. You are developing a function to start the batch job.
You add the following parameters to the function.

Parameter name	Description
`fileTasks`	a list of tasks to be run
`jobId`	the identifier that must be assigned to the job
`outputContainerSasUrl`	a storage SAS URL to store successfully converted files
`failedContainerSasUrl`	a storage SAS URL to store copies of files that failed to convert.

You must ensure that converted files are placed in the container referenced by the outputContainerSasUrl parameter. Files which fail to convert are placed in the container referenced by the failedContainerSasUrl parameter.

You need to ensure the files are correctly processed.
How should you complete the code segment? To answer, select the appropriate options in the answer area.

Answer Area

```
public list<CloudTasks> StartTasks(List<FileTask> fileTasks, string jobId,
 string outputContainerSasUrl, string failedContainerSasUrl)
{
  BatchSharedKeyCredentials sharedKeyCredentials =
   new BatchSharedKeyCredentials(batchAccountUrl, batchAccountName,
batchAccountKey);
 List<CloudTask> tasks = new List<CloudTask>();
 using (BatchClient batchClient = BatchClient.Open(sharedKeyCredentials))
{
   CloudJob = batchClient.JobOperations.[ ▼ ]();
```

GetJob
GetTask
EnableJob
CreateJob

```
        job.Id = jobId,
        job.PoolInfromation = new PoolInformation { PoolId = poolId };
        job.Commit();
        fileTasks.ForEach((fileTask) =>
        {
          string taskId = $"Task{DateTime.Now.ToFileTimeUtc().ToString()}";
          CloudTask task = new CloudTask (taskId, fileTask.Command);
          List<OutputFile> outputFileList = new List<OutputFile>();
          OutputFileBlobContainerDestination outputContainer =
           new OutputFileBlobContainerDestination(outputContainerSasUrl);
        OutputFileBlobContainerDestination failedContainer =
           new OutputFileBlobContainerDestination (failedContainerSasUrl);
        outputFileList.Add(new OutputFile(fileTask.Output,
           new OutputFileDestination(outputContainer),
           new OutputFileUploadOptions(OutputFileUploadCondition.[ ▼ ])));
```

TaskSuccess
TaskFailure
TaskCompletion

```
          outputFileList.Add(new OutputFile(fileTask.Output,
           new OutputFileDestination(failedContainer),
           new OutputFileUploadOptions(OutputFileUploadCondition,[ ▼ ])));
```

TaskSuccess
TaskFailure
TaskCompletion

```
           task [ ▼ ] =outputFileList;
```

OutputFiles
FilesToStage
ResourceFiles
StageFiles

```
           task.Add(task);
           });
           ]
           return tasks,
        \
```

Box 1: CreateJob -

Box 2: TaskSuccess -
TaskSuccess: Upload the file(s) only after the task process exits with an exit code of 0.
Incorrect: TaskCompletion: Upload the file(s) after the task process exits, no matter what the exit code was.

Box 3: TaskFailure -
TaskFailure:Upload the file(s) only after the task process exits with a nonzero exit code.

Box 4: OutputFiles -
To specify output files for a task, create a collection of OutputFile objects and assign it to the CloudTask.OutputFiles property when you create the task.

References:

https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.batch.protocol.models.outputfileuploadcondition

https://docs.microsoft.com/en-us/azure/batch/batch-task-output-files

Question number 28 :- Azure Search and Index creation

You create index in Azure Seacrh.You need to import the restaurant data into the Azure Search service by using the Azure Search NE SDK.

Solution:

1. Create a SearchServiceClient object to connect to the search index.

2. Create a DataContainer that contains the documents which must be added.

3. Create a DataSource instance and set its Container property to the DataCounter.

4. Set the DataSource property of the SearchServiceClient.

Does the solution meet the goal?

A. Yes

B. No

Answer: B

Explanation

Use the following method:

1. Create a SeacrchIndexClient object to connect to the search index.

2. Create an IndexBatch that contains the documents which must be added.

3. Call the Documents.Index method of the SearchIndexClient and pass the IndexBatch.

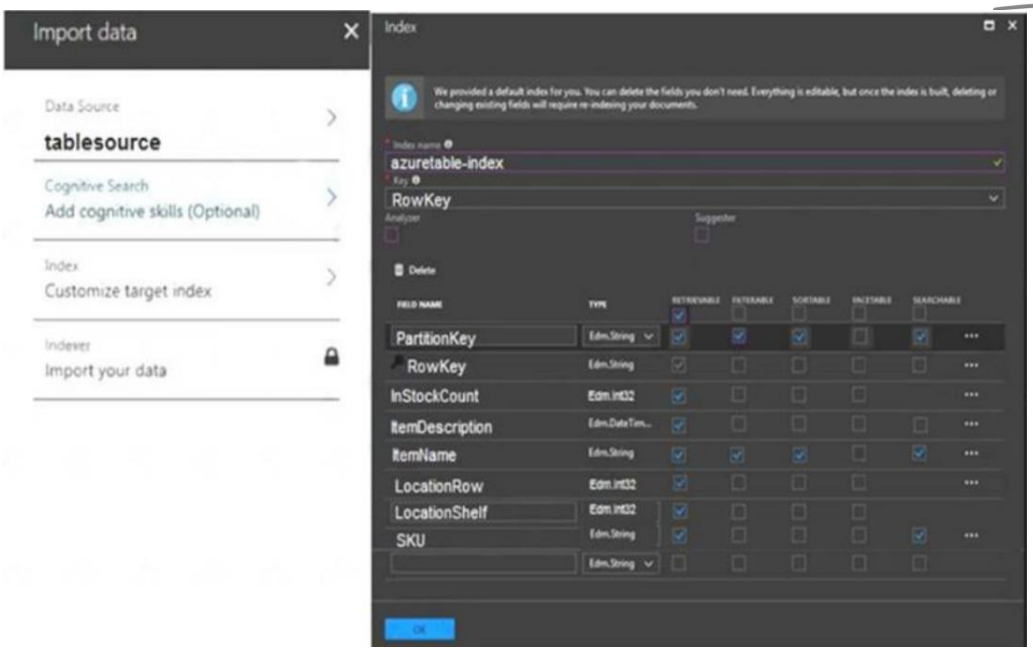
References:

https://docs.microsoft.com/en-us/azure/search-howto-dotnet-sdk

Question number 29 :- Azure Search Index and Indexer

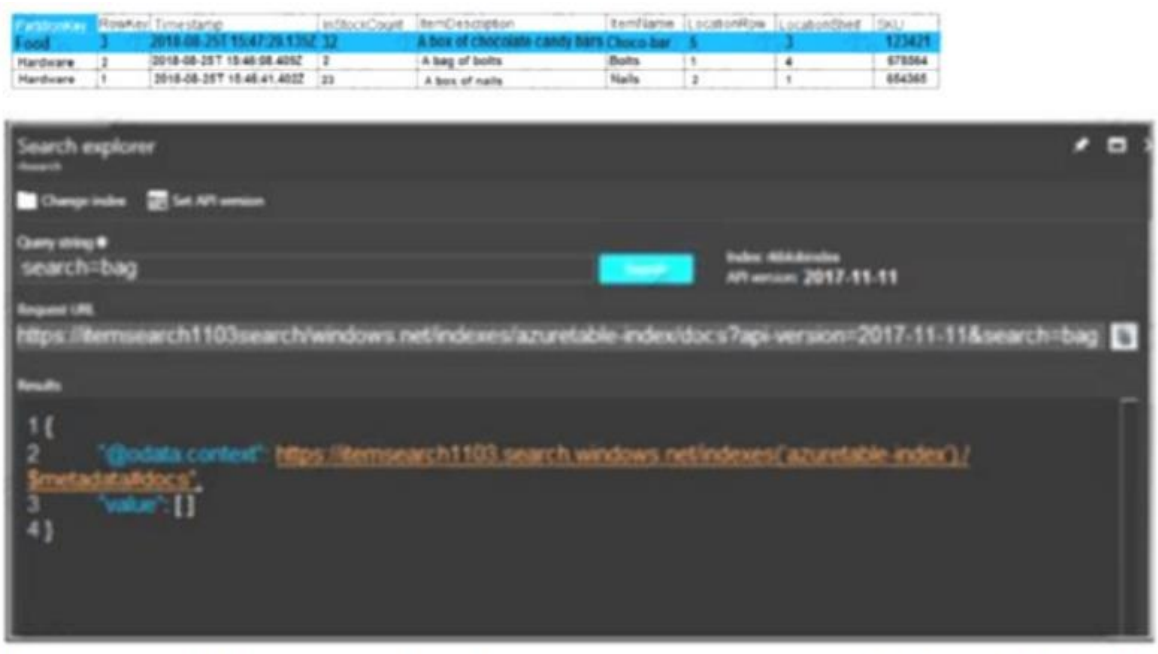
You are validating the configuration of an Azure Search indexer.

The service has been configured with an indexer that uses the Import Data option. The index is configured using options as shown in the Index Configuration exhibit. (Click the Index Configuration tab.)



You use an Azure table as the data source for the import operation. The table contains three records with item inventory data that matches the fields in the Storage

data exhibit. These records were imported when the index was created. (Click the Storage Data tab.) When users search with no filter, all three records are displayed



When users search for items by description, Search explorer returns no records. The Search Explorer exhibit shows the query and results for a test. In the test, a

user is trying to search for all items in the table that have a description that contains the word bag. (Click the Search Explorer tab.)

You need to resolve the issue.For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

	Yes	No
You can resolve the issue by recreating the search index with the same settings for all fields except ItemDescription. Select the SEARCHABLE option for this field	○	○
You can resolve the issue by selecting the index, editing the ItemDescription field, and selecting the SEARCHABLE option for the field.	○	○
You can resolve the issue by running the indexer.	○	○
You can resolve the issue by changing the query string in Search explorer to `bag of` to return the correct results	○	○

Answer: A

Explanation:

Box 1: Yes

The ItemDescription field in not searchable.
Box 2: No

The ItemDescription field in not searchable, but we would need to recreate the index.
Box 3: Yes

An indexer in Azure Search is a crawler that extracts searchable data and metadata from an external Azure data source and populates an index based on field-tofield mappings between the index and your data source. This approach is sometimes referred to as a 'pull model' because the service pulls data in without you

having to write any code that adds data to an index.

Box 4: No References:

https://docs.microsoft.com/en-us/azure/search/search-what-is-an-index
https://docs.microsoft.com/en-us/azure/search/search-indexer-overview

Question number 30 :- Creating Alerts in Azure monitor

You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.

You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA: â€¢ Messages are sent to ContentUploadService. Content is processed by ContentAnalysisService. â€¢ After processing is complete, the content is posted to the social network or a rejection message is posted in its place.

The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.

The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -

The companyâ€™s data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewerâ€™s email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available

CPU cores.

Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track userâ€™s IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         - port: 80
CS12           protocol: TCP
CS13         resources:
CS14           requests:
CS15             cpu: 1.0
CS16             memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22         protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

```
AM01 {
AM02       "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03       "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05       "createdDateTime" : "2019-12-24T06:01:44Z",
AM06       "logoUrl" : null,
AM07       "logoutUrl" : null,
AM08       "name" : "ContentAnalysisService",
AM09
AM10
AM11       "orgRestrictions" : [],
AM12       "parentalControlSettings" : {
AM13         "countriesBlockedForMinors" : [],
AM14           "legalAgeGroupRule" : "Allow"
AM15       },
AM16       "passwordCredentials" : []
AM17 }
```

You need to monitor ContentUploadService according to the requirements.
Which command should you use?

- **A.** az monitor metrics alert create -n alert -g --scopes --condition "avg Percentage CPU > 8"
- **B.** az monitor metrics alert create -n alert -g - -scopes id - -condition "avg Percentage CPU > 800"
- **C.** az monitor metrics alert create -n alert -g â€¦ - -scopes â€¦ - -condition "CPU Usage > 800"
- **D.** az monitor metrics alert create â€"n alert â€"g â€¦ - -scopes â€¦ - -condition "CPU Usage > 8"

Answer B

Get-AzureRmResource

/subscriptions/9121a69c-344f-4565-86d8-dcaf2483c9d8/resourceGroups/res1/providers/Microsoft.DBforPostgreSQL/servers/fewatelemedicine

```
az monitor metrics alert create -n myalert1 -g res1 --scopes
```
/subscriptions/9121a69c-344f-4565-86d8-dcaf2483c9d8/resourceGroups/res1/providers/Microsoft.DBforPostgreSQL/servers/fewatelemedicine `--condition "avg Percentage CPU > 90" --description "High CPU"`

```
az monitor metrics alert create -n myalert1 -g res1 --scopes
```
/subscriptions/9121a69c-344f-4565-86d8-dcaf2483c9d8/resourceGroups/res1/providers/Microsoft.DBforPostgreSQL/servers/fewatelemedicine `--condition "avg cpu_percent> 90" --description "High CPU"`

https://github.com/Azure/azure-cli/issues/12925

az monitor metrics alert create --help

Question number 31 :- Application insight for Mobile Apps

You must implement Application Insights instrumentation capabilities utilizing the Azure Mobile Apps SDK to provide meaningful analysis of user interactions with a molbile app. You need to capture the data required to implement the Usage Analytics feature of Application Insights.
Which three data values should you capture? Each correct answer presents part of the solution.NOTE: Each correct selection is worth one point.

A. Trace
B. Session Id
C. Exception
D. User Id
E. Events

Answer BDE

https://docs.microsoft.com/en-us/azure/azure-monitor/learn/mobile-center-quickstart

https://github.com/microsoft/ApplicationInsights-Android