

1. You need to build a chatbot that meets the following requirements:

- Supports chit-chat, knowledge base, and multilingual models
- Performs sentiment analysis on user messages
- Selects the best language model automatically

What should you integrate into the chatbot?

- A. QnA Maker, Language Understanding, and Dispatch
- B. Translator, Speech, and Dispatch
- C. Language Understanding, Text Analytics, and QnA Maker
- D. Text Analytics, Translator, and Dispatch

Correct Answer: C

Language Understanding: An AI service that allows users to interact with your applications, bots, and IoT devices by using natural language.

QnA Maker is a cloud-based Natural Language Processing (NLP) service that allows you to create a natural conversational layer over your data. It is used to find the most appropriate answer for any input from your custom knowledge base (KB) of information.

Text Analytics: Mine insights in unstructured text using natural language processing (NLP) (no machine learning expertise required). Gain a deeper understanding of customer opinions with sentiment analysis. The Language Detection feature of the Azure Text Analytics REST API evaluates text input

2. Your company wants to reduce how long it takes for employees to log receipts in expense reports. All the receipts are in English.

You need to extract top-level information from the receipts, such as the vendor and the transaction total. The solution must minimize development effort.

Which Azure service should you use?

- A. Custom Vision
- B. Personalizer
- C. Form Recognizer
- D. Computer Vision

Correct Answer: C

Azure Form Recognizer is a cognitive service that lets you build automated data processing software using machine learning technology. Identify and extract text, key/value pairs, selection marks, tables, and structure from your document's. the service outputs structured data that includes the relationships in the original file, bounding boxes, confidence and more.

Form Recognizer is composed of custom document processing models, prebuilt models for invoices, receipts, IDs and business cards, and the layout model.

3. You are developing a new sales system that will process the video and text from a public-facing website. You plan to monitor the sales system to ensure that it provides equitable results regardless of the user's location or background.

Which two responsible AI principles provide guidance to meet the monitoring requirements? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. transparency
- B. fairness
- C. inclusiveness
- D. reliability and safety
- E. privacy and security

Correct Answer: BC

As you implement AI solutions, consider the following principles in your solution:

- Fairness:** AI systems should treat all people fairly.
- Reliability and safety:** AI systems should perform reliably and safely.
- Privacy and security:** AI systems should be secure and respect privacy.
- Inclusiveness:** AI systems should empower everyone and engage people.
- Transparency:** AI systems should be understandable.
- Accountability:** People should be accountable for AI systems.

4. You plan to use containerized versions of the Anomaly Detector API on local devices for testing and in on-premises datacenters.

You need to ensure that the containerized deployments meet the following requirements:

- ☞ Prevent billing and API information from being stored in the command-line histories of the devices that run the container.
- ☞ Control access to the container images by using Azure role-based access control (Azure RBAC).

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Actions	Answer Area
Create a custom Dockerfile.	Pull the Anomaly Detector container image.
Pull the Anomaly Detector container image.	Create a custom Dockerfile.
Distribute a docker run script.	Push the image to an Azure container registry.
Push the image to an Azure container registry.	Distribute a docker run script.
Build the image.	
Push the image to Docker Hub.	

5. You build a custom Form Recognizer model.

You receive sample files to use for training the model as shown in the following table.

Which three files can you use to train the model? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

Name	Type	Size
File1	PDF	20 MB
File2	MP4	100 MB
File3	JPG	20 MB
File4	PDF	100 MB
File5	GIF	1 MB
File6	JPG	40 MB

- A. File1
- B. File2
- C. File3
- D. File4
- E. File5
- F. File6

Correct Answer: ACF

Form Recognizer works on input documents that meet these requirements:

Format must be JPG, PNG, PDF (text or scanned), or TIFF. Text-embedded PDFs are best because there's no possibility of error in character extraction and location.

File size must be less than 50 MB.

6. A customer uses Azure Cognitive Search.

The customer plans to enable a server-side encryption and use customer-managed keys (CMK) stored in Azure.

What are three implications of the planned change? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. The index size will increase.
- B. Query times will increase.
- C. A self-signed X.509 certificate is required.
- D. The index size will decrease.
- E. Query times will decrease.
- F. Azure Key Vault is required.

Correct Answer: ABE

7. You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a public endpoint, and you configure an IP firewall rule.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Instead deploy service1 and a private (not public) endpoint to a new virtual network, and you configure Azure Private Link.

10. You are developing an internet-based training solution for remote learners. Your company identifies that during the training, some learners leave their desk for long periods or become distracted. You need to use a video and audio feed from each learner's computer to detect whether the learner is present and paying attention. The solution must minimize development effort and identify each learner. Which Azure Cognitive Services service should you use for each requirement? To answer, select the appropriate options in the answer area.

Answer Area

From a learner's video feed, verify whether the learner is present:

Face
Speech
Text Analytics

From a learner's facial expression in the video feed, verify whether the learner is paying attention:

Face
Speech
Text Analytics

From a learner's audio feed, detect whether the learner is talking:

Face
Speech
Text Analytics

10. You are developing an internet-based training solution for remote learners. Your company identifies that during the training, some learners leave their desk for long periods or become distracted. You need to use a video and audio feed from each learner's computer to detect whether the learner is present and paying attention. The solution must minimize development effort and identify each learner. Which Azure Cognitive Services service should you use for each requirement? To answer, select the appropriate options in the answer area.

Answer Area

From a learner's video feed, verify whether the learner is present:

Face
Speech
Text Analytics

From a learner's facial expression in the video feed, verify whether the learner is paying attention:

Face
Speech
Text Analytics

From a learner's audio feed, detect whether the learner is talking:

Face
Speech
Text Analytics

11. You plan to provision a QnA Maker service in a new resource group named RG1.

In RG1, you create an App Service plan named AP1.

Which two Azure resources are automatically created in RG1 when you provision the QnA Maker service? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Language Understanding
- B. Azure SQL Database
- C. Azure Storage
- D. Azure Cognitive Search
- E. Azure App Service

Correct Answer: DE

12. You are building a language model by using a Language Understanding (classic) service.

You create a new Language Understanding (classic) resource.

You need to add more contributors.

What should you use?

- A. a conditional access policy in Azure Active Directory (Azure AD)
- B. the Access control (IAM) page for the authoring resources in the Azure portal
- C. the Access control (IAM) page for the prediction resources in the Azure portal

Correct Answer: B

13. You have an Azure Cognitive Search service.
During the past 12 months, query volume steadily increased.
You discover that some search query requests to the Cognitive Search service are being throttled.
You need to reduce the likelihood that search query requests are throttled.
Solution: You migrate to a Cognitive Search service that uses a higher tier.

- A. Yes
- B. No

Correct Answer: A

A simple fix to most throttling issues is to throw more resources at the search service (typically replicas for query-based throttling, or partitions for indexing-based throttling). However, increasing replicas or partitions adds cost, which is why it is important to know the reason why throttling is occurring at all.

14. You need to develop an automated call handling system that can respond to callers in their own language. The system will support only French and English.

Which Azure Cognitive Services service should you use to meet each requirement? To answer, drag the appropriate services to the correct requirements. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Services

Speaker Recognition

Speech to Text

Text Analytics

Text to Speech

Translator

Answer Area

Detect the incoming language:

Text Analytics

Respond in the callers' own language:

Translator

15. You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a private endpoint to vnet1.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service powered by Azure Private Link. By enabling a private endpoint, you're bringing the service into your virtual network.

The service could be an Azure service such as:

- ☞ Azure Storage
- ☞ Azure Cosmos DB
- ☞ Azure SQL Database
- ☞ Your own service using a Private Link Service.

16. You have a Language Understanding resource named lu1.
You build and deploy an Azure bot named bot1 that uses lu1.
You need to ensure that bot1 adheres to the Microsoft responsible AI principle of inclusiveness.
How should you extend bot1?

- A. Implement authentication for bot1.
- B. Enable active learning for lu1.
- C. Host lu1 in a container.
- D. Add Direct Line Speech to bot1.

Correct Answer: D

Inclusiveness: AI systems should empower everyone and engage people.
Direct Line Speech is a robust, end-to-end solution for creating a flexible, extensible voice assistant. It is powered by the Bot Framework and its Direct Line Speech channel, that is optimized for voice-in, voice-out interaction with bots.

18. You have an Azure Cognitive Search service.

During the past 12 months, query volume steadily increased.

You discover that some search query requests to the Cognitive Search service are being throttled.

You need to reduce the likelihood that search query requests are throttled.

Solution: You add replicas.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

A simple fix to most throttling issues is to throw more resources at the search service (typically replicas for query-based throttling, or partitions for indexing-based throttling).

However, increasing replicas or partitions adds cost, which is why it is important to know the reason why throttling is occurring at all.

19. You have a factory that produces food products.

You need to build a monitoring solution for staff compliance with personal protective equipment (PPE) requirements. The solution must meet the following requirements:

- * Identify staff who have removed masks or safety glasses.
- * Perform a compliance check every 15 minutes.
- * Minimize development effort.
- * Minimize costs.

Which service should you use?

- A. Face
- B. Computer Vision
- C. Azure Video Analyzer for Media (formerly Video Indexer)

Correct Answer: A

Face API is an AI service that analyzes faces in images.

Embed facial recognition into your apps for a seamless and highly secured user experience. No machine-learning expertise is required. Features include face detection that perceives facial features and attributes such as a face mask, glasses, or face location in an image, and identification of a person by a match to your private repository or via photo ID.

21. You are developing a webpage that will use the Azure Video Analyzer for Media (previously Video Indexer) service to display videos of internal company meetings.

You embed the Player widget and the Cognitive Insights widget into the page.

You need to configure the widgets to meet the following requirements:

- Ensure that users can search for keywords.
- Display the names and faces of people in the video.
- Show captions in the video in English (United States).

How should you complete the URL for each widget? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Values

en-US
false
people,keywords
people,search
search
true

Answer Area**Cognitive Insights Widget**

`https://www.videoindexer.ai/embed/insights/<accountId>/<videoId>/?widgets=`

Value

`controls=`

Value

Player Widget

`https://www.videoindexer.ai/embed/player/<accountId>/<videoId>/? showcaptions=`

Value

`captions=`

Value

23. You have a Custom Vision resource named acvdev in a development environment. You have a Custom Vision resource named acvprod in a production environment. In acvdev, you build an object detection model named obj1 in a project named proj1. You need to move obj1 to acvprod. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

- Use the GetProjects endpoint on acvdev.
- Use the ExportProject endpoint on acvdev.
- Use the ExportIteration endpoint on acvdev.
- Use the GetIterations endpoint on acvdev.
- Use the UpdateProject endpoint on acvprod.

Answer Area

Use the GetProjects endpoint on acvdev.

Use the ExportProject endpoint on acvdev.

Use the ImportProject endpoint on acvprod.



25. You are building a model that will be used in an iOS app.

You have images of cats and dogs. Each image contains either a cat or a dog.

You need to use the Custom Vision service to detect whether the images is of a cat or a dog.

How should you configure the project in the Custom Vision portal? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Project Types:

Classification
Object Detection

Classification Types:

Multiclass (Single tag per image)
Multilabel (Multiple tags per image)

Domains:

Audit
Food
General
General (compact)
Landmarks
Landmarks (compact)
Retail
Retail (compact)

26. You have an Azure Video Analyzer for Media (previously Video Indexer) service that is used to provide a search interface over company videos on your company's website.

You need to be able to search for videos based on who is present in the video.

What should you do?

- A. Create a person model and associate the model to the videos.
- B. Create person objects and provide face images for each object.
- C. Invite the entire staff of the company to Video Indexer.
- D. Edit the faces in the videos.
- E. Upload names to a language model.

Correct Answer: A

Video Indexer supports multiple Person models per account. Once a model is created, you can use it by providing the model ID of a specific Person model when uploading/indexing or reindexing a video. Training a new face for a video updates the specific custom model that the video was associated with.

Note: Video Indexer supports face detection and celebrity recognition for video content. The celebrity recognition feature covers about one million faces based on commonly requested data source such as IMDB, Wikipedia, and top LinkedIn influencers. Faces that aren't recognized by the celebrity recognition feature are detected but left unnamed. Once you label a face with a name, the face and name get added to your account's Person model. Video Indexer will then recognize this face in your future videos and past videos.

26. You have an Azure Video Analyzer for Media (previously Video Indexer) service that is used to provide a search interface over company videos on your company's website.

You need to be able to search for videos based on who is present in the video.

What should you do?

- A. Create a person model and associate the model to the videos.
- B. Create person objects and provide face images for each object.
- C. Invite the entire staff of the company to Video Indexer.
- D. Edit the faces in the videos.
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Note: Video Indexer supports face detection and celebrity recognition for video content. The celebrity recognition feature covers about one million faces based on commonly requested data source such as IMDB, Wikipedia, and top LinkedIn influencers. Faces that aren't recognized by the celebrity recognition feature are detected but left unnamed. Once you label a face with a name, the face and name get added to your account's Person model. Video Indexer will then recognize this face in your future videos and past videos.

29. You are developing a photo application that will find photos of a person based on a sample image by using the Face API.

You need to create a POST request to find the photos.

How should you complete the request? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all.

You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values

detect
findsimilar
group
identify
matchFace
matchPerson
verify

Answer Area

```
POST {Endpoint}/face/v1.0/ detect  
Request Body  
{  
    "faceId": "c5c24a82-6845-4031-9d5d-978df9175426",  
    "largeFaceListId": "sample_list",  
    "maxNumOfCandidatesReturned": 10,  
    "mode": "matchPerson"  
}
```

32. You are building an app that will enable users to upload images. The solution must meet the following requirements:

- * Automatically suggest alt text for the images.
- * Detect inappropriate images and block them.
- * Minimize development effort.

You need to recommend a computer vision endpoint for each requirement.

What should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Generate alt text:

<code>https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate</code>
<code>https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image</code>
<code>https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description</code>

Detect inappropriate content:

<code>https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate</code>
<code>https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image</code>
<code>https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description</code>
<code>https://westus.api.cognitive.microsoft.com/vision/v3.2/describe?maxCandidates=1</code>

33. You need to build a solution that will use optical character recognition (OCR) to scan sensitive documents by using the Computer Vision API. The solution must NOT be deployed to the public cloud.

What should you do?

- A. Build an on-premises web app to query the Computer Vision endpoint.
- B. Host the Computer Vision endpoint in a container on an on-premises server.
- C. Host an exported Open Neural Network Exchange (ONNX) model on an on-premises server.
- D. Build an Azure web app to query the Computer Vision endpoint.

Correct Answer: B

One option to manage your Computer Vision containers on-premises is to use Kubernetes and Helm. Three primary parameters for all Cognitive Services containers are required. The Microsoft Software License Terms must be present with a value of accept. An Endpoint URI and API key are also needed.

34. You develop an application to identify species of flowers by training a Custom Vision model.
You receive images of new flower species.
You need to add the new images to the classifier.
Solution: You add the new images, and then use the Smart Labeler tool.
Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

The model need to be extended and retrained.

Note: Smart Labeler to generate suggested tags for images. This lets you label a large number of images more quickly when training a Custom Vision model.

38) You plan to use a Language Understanding application named app1 that is deployed to a container. App1 was developed by using a Language Understanding authoring resource named lu1. App1 has the versions shown in the following table.

You need to create a container that uses the latest deployable version of app1.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Run a container that has version set as an environment variable.	Export the model by using the Export for containers (GZIP) option.
Export the model by using the Export as JSON option.	Select v1.1 of app1.
Select v1.1 of app1.	Run a container and mount the model file.
Run a container and mount the model file.	
Select v1.0 of app1.	
Export the model by using the Export for containers (GZIP) option.	
Select v1.2 of app1.	

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-container-howto>

<https://shapingpixel.com>

40) You plan to deploy a containerized version of an Azure Cognitive Services service that will be used for text analysis. You configure <https://contoso.cognitiveservices.azure.com> as the endpoint URI for the service, and you pull the latest version of the Text Analytics Sentiment Analysis container.

You need to run the container on an Azure virtual machine by using Docker.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
docker run --rm -it -p 5000:5000 --memory 8g --cpus 1 \
```

<http://contoso.blob.core.windows.net>
<https://contoso.cognitiveservices.azure.com>
<mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase>
<mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment>

```
Eula=accept \
```

```
Billing=
```

<http://contoso.blob.core.windows.net>
<https://contoso.cognitiveservices.azure.com>
<mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase>
<mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment>

```
ApiKey=xxxxxxxxxxxxxxxxxxxxxx
```

41) You have the following C# method for creating Azure Cognitive Services resources programmatically.

```
static void create_resource(CognitiveServicesManagementClient client, string
resource_name, string kind, string account_tier, string location)
{
    CognitiveServicesAccount parameters =
        new CognitiveServicesAccount(null, null, kind, location, resource_name,
new CognitiveServicesAccountProperties(), new Sku(account_tier));
    var result = client.Accounts.Create(resource_group_name, account_tier,
parameters);
}
```

You need to call the method to create a free Azure resource in the West US Azure region. The resource will be used to generate captions of images automatically.

Which code should you use?

- A. create_resource(client, "res1", "ComputerVision", "F0", "westus")
- B. create_resource(client, "res1", "CustomVision.Prediction", "F0", "westus")
- C. create_resource(client, "res1", "ComputerVision", "S0", "westus")
- D. create_resource(client, "res1", "CustomVision.Prediction", "S0", "westus")

Correct Answer: A

42) You successfully run the following HTTP request.

```
POST https://management.azure.com/subscriptions/18c51a87-3a69-47a8-aedc-a54745f708a1/resourceGroups/RG1/providers/Microsoft.CognitiveServices/accounts/contoso1/regenerateKey?api-version=2017-04-18
Body>{"keyName": "Key2"}
```

What is the result of the request?

- A. A key for Azure Cognitive Services was generated in Azure Key Vault.
- B. A new query key was generated.
- C. The primary subscription key and the secondary subscription key were rotated.
- D. The secondary subscription key was reset.

Correct Answer: D

44) You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a public endpoint, and you configure a network security group (NSG) for vnet1.

Does this meet the goal?

- A. Yes
- B. No

45) You are developing a streaming Speech to Text solution that will use the Speech SDK and MP3 encoding. You need to develop a method to convert speech to text for streaming MP3 data. How should you complete the code? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area

```
var audioFormat = AudioStreamFormat.GetCompressedFormat(AudioStreamContainerFormat.MP3);  
  
var speechConfig = SpeechConfig.FromSubscription("18c51a87-3a69-47a8-aedc-a54745f708a1", "westus");  
  
var audioConfig = AudioConfig.FromStreamInput(pushStream, audioFormat);  
  
using (var recognizer = new SpeechRecognizer(speechConfig, audioConfig))  
{  
    var result = await recognizer.RecognizeOnceAsync();  
    var text = result.Text;  
}
```

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/how-to-use-codec-compressed-audio-input-streams?tabs=debian&pivots=programming-language-csharp>

46) You have receipts that are accessible from a URL.

You need to extract data from the receipts by using Form Recognizer and the SDK. The solution must use a prebuilt model. Which client and method should you use?

- A. the FormRecognizerClient client and the StartRecognizeContentFromUri method
- B. the FormTrainingClient client and the StartRecognizeContentFromUri method
- C. the FormRecognizerClient client and the StartRecognizeReceiptsFromUri method
- D. the FormTrainingClient client and the StartRecognizeReceiptsFromUri method

Correct Answer: C

47) You have a collection of 50,000 scanned documents that contain text.
You plan to make the text available through Azure Cognitive Search.
You need to configure an enrichment pipeline to perform optical character recognition (OCR) and text analytics. The solution must minimize costs.
What should you attach to the skillset?

- A. a new Computer Vision resource
- B. a free (Limited enrichments) Cognitive Services resource
- C. an Azure Machine Learning Designer pipeline
- D. a new Cognitive Services resource that uses the S0 pricing tier

Correct Answer: D

48) You have an Azure Cognitive Search service.

During the past 12 months, query volume steadily increased.

You discover that some search query requests to the Cognitive Search service are being throttled.

You need to reduce the likelihood that search query requests are throttled.

Solution: You add indexes.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Instead, you could migrate to a Cognitive Search service that uses a higher tier.

Note: A simple fix to most throttling issues is to throw more resources at the search service (typically replicas for query-based throttling, or partitions for indexing-based throttling). However, increasing replicas or partitions adds cost, which is why it is important to know the reason why throttling is occurring at all.

Reference:

<https://docs.microsoft.com/en-us/azure/search/search-performance-analysis>

49) You have an Azure Cognitive Search service.

During the past 12 months, query volume steadily increased.

You discover that some search query requests to the Cognitive Search service are being throttled.

You need to reduce the likelihood that search query requests are throttled.

Solution: You enable customer-managed key (CMK) encryption.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Customer-managed key (CMK) encryption does not affect throttling.

Instead, you could migrate to a Cognitive Search service that uses a higher tier.

Note: A simple fix to most throttling issues is to throw more resources at the search service (typically replicas for query-based throttling, or partitions for indexing-based throttling). However, increasing replicas or partitions adds cost, which is why it is important to know the reason why throttling is occurring at all.

Reference:

<https://docs.microsoft.com/en-us/azure/search/search-performance-analysis>

50) You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a private endpoint to vnet1.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service powered by Azure Private Link. By enabling a private endpoint, you're bringing the service into your virtual network.

The service could be an Azure service such as:

- Azure Storage
- Azure Cosmos DB
- Azure SQL Database
- Your own service using a Private Link Service.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-overview>

51) You have an Azure Cognitive Search instance that indexes purchase orders by using Form Recognizer. You need to analyze the extracted information by using Microsoft Power BI. The solution must minimize development effort. What should you add to the indexer?

- A. a projection group
- B. a table projection
- C. a file projection
- D. an object projection

Correct Answer: B

Step 4: Configure additional settings for your resource as needed, read and accept the conditions (as applicable), and then select Review + create.

Step 5: Navigate to the Azure portal. Then locate and select The Text Analytics service resource Text12345678 (which you created in Step 4).

Step 6: Next, from the left-hand navigation menu, locate Monitoring and select Diagnostic settings. This screen contains all previously created diagnostic settings for this resource.

Step 7: Select + Add diagnostic setting.

Step 8: When prompted to configure, select the storage account and OMS workspace that you'd like to use to store your diagnostic logs. Note: If you don't have a storage account or OMS workspace, follow the prompts to create one.

Step 9: Select Audit, RequestResponse, and AllMetrics. Then set the retention period for your diagnostic log data. If a retention policy is set to zero, events for that log category are stored indefinitely.

Step 10: Click Save.

It can take up to two hours before logging data is available to query and analyze. So don't worry if you don't see anything right away.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/cognitive-services-apis-create-account>

<https://docs.microsoft.com/en-us/azure/cognitive-services/diagnostic-logging>

53) SIMULATION -

You need to create a search service named search12345678 that will index a sample Azure Cosmos DB database named hotels-sample. The solution must ensure that only English language fields are retrievable.

To complete this task, sign in to the Azure portal.

Correct Answer: See explanation below.

Part 1: Create a search service search12345678

Step 1: Sign in to the QnA portal.

Step 2: Create an Azure Cognitive multi-service resource:



Step 3: On the Create page, provide the following information.

Name: search12345678 -

<https://shapingpixel.com>

Step 4: Click Review + create -

Part 2: Start the Import data wizard and create a data source

Step 5: Click Import data on the command bar to create and populate a search index.



Step 6: In the wizard, click Connect to your data > Samples > hotels-sample. This data source is built-in. If you were creating your own data source, you would need to specify a name, type, and connection information. Once created, it becomes an "existing data source" that can be reused in other import operations.

A screenshot of the 'Import data' wizard interface. At the top, there are tabs: 'Connect to your data' (underlined), 'Enrich content (Optional)', 'Customize target index', and 'Create an index'. Below these tabs is a descriptive text: 'Create and load a search index using data from an existing Azure data source in your current subscription. Azure Cognitive Search crawls the data structure you provide, extracts searchable content, optionally enriches it with cognitive skills, and loads it into an index.' A 'Learn more' link is also present. The main form has several fields: 'Data Source' (dropdown menu with 'Samples' selected, circled with a red number 1), 'Type' (dropdown menu with two options: 'Azure blob storage' and 'Azure Data Lake Storage', circled with a red number 2), 'Name' (text input field containing 'realestate-us-sample'), and 'Index' (dropdown menu with 'hotels-sample' selected, circled with a red number 2).

54) SIMULATION -

You plan to create a solution to generate captions for images that will be read from Azure Blob Storage.

You need to create a service in Azure Cognitive Services for the solution. The service must be named captions12345678 and must use the Free pricing tier.

To complete this task, sign in to the Azure portal.

Correct Answer: See explanation below.

Part 1: Create a search service captions12345678

Step 1: Sign in to the QnA portal.

Step 2: Create an Azure Cognitive multi-service resource:



Step 3: On the Create page, provide the following information.
Name: captions12345678

Step 4: Click Review + create -

(Step 5: Create a data source

In Connect to your data, choose Azure Blob Storage.

Choose an existing connection to the storage account and container you created. Give the data source a name, and use default values for the rest.)

Microsoft Azure

Dashboard > Import data

* Connect to your data Add cognitive skills (Optional) Customize target index Create an indexer

Create and load a search index using data from an external data source. Azure Cognitive Search crawls the data structure you provide, extracts searchable content, optionally enriches it with cognitive skills, and loads it into an index. Learn more

Data Source → Azure Blob Storage

Data source name * signs ✓

Data to extract Content and metadata

Parsing mode Default

Connection string * → DefaultEndpointsProtocol=https;AccountName= ...
Choose an existing connection
 Authenticate using managed identity

Container name * → signs ✓
Blob folder your/folder/here

Description (optional)

<https://docs.microsoft.com/en-us/azure/search/search-create-service-portal> <https://docs.microsoft.com/en-us/azure/search/cognitive-search-quickstart-ocr>

Next: Add cognitive skills (Optional)

55) SIMULATION -

You need to create a Form Recognizer resource named fr12345678.

Use the Form Recognizer sample labeling tool at <https://fott-2-1.azurewebsites.net/> to analyze the invoice located in the C:\Resources\Invoices folder.

Save the results as C:\Resources\Invoices\Results.json.

To complete this task, sign in to the Azure portal and open the Form Recognizer sample labeling tool.

Correct Answer: See explanation below.

Step 1: Sign in to the Azure Portal.

Step 2: Navigate to the Form Recognizer Sample Tool (at <https://fott-2-1.azurewebsites.net>)

Step 3: On the sample tool home page select Use prebuilt model to get data.



56) You have a factory that produces food products.

You need to build a monitoring solution for staff compliance with personal protective equipment (PPE) requirements. The solution must meet the following requirements:

- * Identify staff who have removed masks or safety glasses.
- * Perform a compliance check every 15 minutes.
- * Minimize development effort.
- * Minimize costs.

Which service should you use?

- A. Face
- B. Computer Vision
- C. Azure Video Analyzer for Media (formerly Video Indexer)

Correct Answer: A

Face API is an AI service that analyzes faces in images.

Fusion facial recognition into your apps for a seamless and highly secured user experience. No machine-learning expertise is required. Features include face detection that provides identity, race/age and attributes – such as a face mask, glasses, or face location – from an image, and identification of a person by a match to your private repository or via photo ID.

References:

<https://azure.microsoft.com/en-us/services/cognitive-services/face/>

58) SIMULATION -

Use the following login credentials as needed:

To enter your username, place your cursor in the Sign in box and click on the username below.

To enter your password, place your cursor in the Enter password box and click on the password below.

Azure Username: admin@abc.com -

Azure Password: XXXXXXXXXXXX -

The following information is for technical support purposes only:

Lab Instance: 12345678 -

Task -

You plan to build an API that will identify whether an image includes a Microsoft Surface Pro or Surface Studio.

You need to deploy a service in Azure Cognitive Services for the API. The service must be named AAA12345678 and must be in the East US Azure region. The solution must use the Free pricing tier.

To complete this task, sign in to the Azure portal.

Step 4: Review and create the resource, and wait for deployment to complete. Then go to the deployed resource.

Note: The Computer Vision Image Analysis service can extract a wide variety of visual features from your images. For example, it can determine whether an image contains adult content, find specific brands or objects, or find human faces.

Tag visual features -

Identify and tag visual features in an image, from a set of thousands of recognizable objects, living things, scenery, and actions. When the tags are ambiguous or not common knowledge, the API response provides hints to clarify the context of the tag. Tagging isn't limited to the main subject, such as a person in the foreground, but also includes the setting (indoor or outdoor), furniture, tools, plants, animals, accessories, gadgets, and so on.

Try out the image tagging features quickly and easily in your browser using Vision Studio.

Reference:

<https://docs.microsoft.com/en-us/learn/modules/analyze-images-computer-vision/3-analyze-images>

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview-image-analysis>

Correct Answer: See explanation below.

Step 1: In the Azure dashboard, click Create a resource.

Step 2: In the search bar, type "Cognitive Services."

You'll get information about the cognitive services resource and a legal notice. Click Create.

Step 3: You'll need to specify the following details about the cognitive service (refer to the image below for a completed example of this page):

Subscription: choose your paid or trial subscription, depending on how you created your Azure account.

Resource group: click create new to create a new resource group or choose an existing one.

Region: choose the Azure region for your cognitive service. Choose: East US Azure region.

Name: choose a name for your cognitive service. Enter: AAA12345678

Pricing Tier: Select: Free pricing tier

Step 4: Review and create the resource, and wait for deployment to complete. Then go to the deployed resource.

Note: The Computer Vision Image Analysis service can extract a wide variety of visual features from your images. For example, it can determine whether an image contains adult content, find specific brands or objects, or find human faces.

Tag visual features -

Identify and tag visual features in an image, from a set of thousands of recognizable objects, living things, scenery, and actions.

When the tags are ambiguous or not common knowledge, the API response provides hints to clarify the context of the tag. Tagging isn't limited to the main subject, such as a person in the foreground, but also includes the setting (indoor or outdoor), furniture, tools, plants, animals, accessories, gadgets, and so on.

Try out the image tagging features quickly and easily in your browser using Vision Studio.

Reference:

<https://docs.microsoft.com/en-us/learn/modules/analyze-images-computer-vision/3-analyze-images>

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview-image-analysis>

Correct Answer:  See explanation below.

Step 1: Provision a Cognitive Services resource

If you don't already have one in your subscription, you'll need to provision a Cognitive Services resource.

1. Open the Azure portal at <https://portal.azure.com>, and sign in using the Microsoft account associated with your Azure subscription.
2. Select the Create a resource button, search for cognitive services, and create a Cognitive Services resource with the following settings:

Subscription: Your Azure subscription

Resource group: Choose or create a resource group (if you are using a restricted subscription, you may not have permission to create a new resource group - use the one provided)

Region: East US Azure region -

Name: caption12345678 -

Pricing tier: Free F0 -

3. Select the required checkboxes and create the resource.

Wait for deployment to complete, and then view the deployment details.

4. When the resource has been deployed, go to it and view its Keys and Endpoint page. You will need the endpoint and one of the keys from this page in the next procedure.

Step 2: Save Key and Endpoint values in Params.json

Open the configuration file, C:\Resources\Caption\Params.json, and update the configuration values it contains to reflect the endpoint and an authentication key for your cognitive services resource. Save your changes.

Reference:

<https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/15-computer-vision.html>

Add Private Endpoint

X

Name *

mywebappendpoint



Subscription *

contoso subscription



Virtual network *

myVNet



Subnet *

mySubnet



- ⓘ If you have a network security group (NSG) enabled for the subnet above, it will be disabled for private endpoints on this subnet only. Other resources on the subnet will still have NSG enforcement.

Integrate with private DNS zone ⓘ

No Yes

- ⓘ Your private endpoint will be integrated with the private DNS zone 'privatelink.azurewebsites.net' in the resource group of the selected subnet. If the private DNS zone does not exist, it will be created automatically. [Learn more](#)

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/tutorial-private-endpoint-webapp-portal>

64) You have an Azure IoT hub that receives sensor data from machinery.

You need to build an app that will perform the following actions:

- Perform anomaly detection across multiple correlated sensors.
- Identify the root cause of process stops.
- Send incident alerts.

The solution must minimize development time.

Which Azure service should you use?

- A. Azure Metrics Advisor
- B. Form Recognizer
- C. Azure Machine Learning
- D. Anomaly Detector

Correct Answer: A

67) You are building an AI solution that will use Sentiment Analysis results from surveys to calculate bonuses for customer service staff.

You need to ensure that the solution meets the Microsoft responsible AI principles.

What should you do?

- A. Add a human review and approval step before making decisions that affect the staff's financial situation.
- B. Include the Sentiment Analysis results when surveys return a low confidence score.
- C. Use all the surveys, including surveys by customers who requested that their account be deleted and their data be removed.
- D. Publish the raw survey data to a central location and provide the staff with access to the location.

Correct Answer: A

71) You have an Azure Cognitive Search resource named Search1 that is used by multiple apps.

You need to secure Search1. The solution must meet the following requirements:

- Prevent access to Search1 from the internet.
- Limit the access of each app to specific queries.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

To prevent access from the internet:

- Configure an IP firewall.
- Create a private endpoint.
- Use Azure roles.

To limit access to queries:

- Create a private endpoint.
- Use Azure roles.
- Use key authentication.

73) You are building an app that will scan confidential documents and use the Language service to analyze the contents.

You provision an Azure Cognitive Services resource.

You need to ensure that the app can make requests to the Language service endpoint. The solution must ensure that confidential documents remain on-premises.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

- Run the container and specify an App ID and Client Secret.
- Provision an on-premises Kubernetes cluster that is isolated from the internet.
- Pull an image from the Microsoft Container Registry (MCR).
- Run the container and specify an API key and the Endpoint URL of the Cognitive Services resource.
- Provision an on-premises Kubernetes cluster that has internet connectivity.
- Pull an image from Docker Hub.
- Provision an Azure Kubernetes Service (AKS) resource.

Answer Area

- Pull an image from the Microsoft Container Registry (MCR).
- Provision an on-premises Kubernetes cluster that is isolated from the internet.
- Run the container and specify an API key and the Endpoint URL of the Cognitive Services resource.



74) You have an Azure subscription that has the following configurations:

- Subscription ID: 8d3591aa-96b8-4737-ad09-00f9b1ed35ad
- Tenant ID: 3edfe572-cb54-3ced-ae12-c5c177f39a12

You plan to create a resource that will perform sentiment analysis and optical character recognition (OCR).

You need to use an HTTP request to create the resource in the subscription. The solution must use a single key and endpoint.

How should you complete the request? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

https://management.azure.com/

subscriptions/3edfe572-cb54-3ced-ae12-c5c177f39a12
subscriptions/8d3591aa-96b8-4737-ad09-00f9b1ed35ad
tenant/3edfe572-cb54-3ced-ae12-c5c177f39a12
tenant/8d3591aa-96b8-4737-ad09-00f9b1ed35ad

/resourceGroups/OCRProject/providers/

Microsoft.ApiManagement
Microsoft.CognitiveServices
Microsoft.ContainerService
Microsoft.KeyVault

/accounts/C51/api-version=2021-10-01

77) HOTSPOT -

You are developing an application that will use the Computer Vision client library. The application has the following code.

```
public async Task>AnalyzeImage(ComputerVisionClient client, string localImage)
{
    List<VisualFeatureTypes> features = new List<VisualFeatureTypes>()
    {
        VisualFeatureTypes.Description,
        VisualFeatureTypes.Tags,
    };
    using (Stream imageStream = File.OpenRead(localImage))
    {
        try
        {
            ImageAnalysis results = await client.AnalyzeImageInStreamAsync(imageStream, features);

            foreach (var caption in results.Description.Captions)
            {
                Console.WriteLine($"{caption.Text} with confidence {caption.Confidence}");
            }

            foreach (var tag in results.Tags)
            {
                Console.WriteLine($"{tag.Name} {tag.Confidence}");
            }
        }
        catch (Exception ex)
        {
            Console.WriteLine(ex.Message);
        }
    }
}
```

78) You are developing a method that uses the Computer Vision client library. The method will perform optical character recognition (OCR) in images. The method has the following code.

```
public static async Task ReadFileUrl(ComputerVisionClient client, string urlFile)
{
    const int numberOfCharsInOperationId = 36;

    var txtHeaders = await client.ReadAsync(urlFile, language: "en");

    string opLocation = txtHeaders.OperationLocation;
    string operationId = opLocation.Substring(opLocation.Length -
numberOfCharsInOperationId);

    ReadOperationResult results;

    results = await client.GetReadResultAsync(Guid.Parse(operationId));

    var textUrlFileResults = results.AnalyzeResult.ReadResults;
    foreach (ReadResult page in textUrlFileResults)
    {
        foreach (Line line in page.Lines)
        {
            Console.WriteLine(line.Text);
        }
    }
}
```

During testing, you discover that the call to the GetReadResultAsync method occurs before the read operation is complete. You need to prevent the GetReadResultAsync method from proceeding until the read operation is complete. Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

79) You have a Computer Vision resource named contoso1 that is hosted in the West US Azure region. You need to use contoso1 to make a different size of a product photo by using the smart cropping feature. How should you complete the API URL? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area

```
curl -H "Ocp-Apim-Subscription-Key: xxx" /  
-o "sample.png" -H "Content-Type: application/json" /  
"https://api.projectoxford.ai  
"https://contoso1.cognitiveservices.azure.com  
"https://westus.api.cognitive.microsoft.com" /vision/v3.1/  
areaOfInterest  
detect  
generateThumbnail  
?width=100&height=100&smartCropping=true" /  
-d "{\"url\": \"https://upload.litwareinc.org/litware/bicycle.jpg\"}"
```

Reference:

<https://westus.dev.cognitive.microsoft.com/docs/services/computer-vision-v3-2/operations/56f91f2e778daf14a499f21b>

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-generating-thumbnails#examples>

80) DRAG DROP -

You are developing a webpage that will use the Azure Video Analyzer for Media (previously Video Indexer) service to display videos of internal company meetings.

You embed the Player widget and the Cognitive Insights widget into the page.

You need to configure the widgets to meet the following requirements:

- ☞ Ensure that users can search for keywords.
- ☞ Display the names and faces of people in the video.
- ☞ Show captions in the video in English (United States).

How should you complete the URL for each widget? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values	Answer Area
false	Cognitive Insights Widget <code>https://www.videoindexer.ai/embed/insights/<accountId>/<videoId>/?widgets=</code> <input type="text" value="people,keywords"/> <code>controls=</code> <input type="text" value="search"/>
people,search	Player Widget <code>https://www.videoindexer.ai/embed/player/<accountId>/<videoId>/? showcaptions=</code> <input type="text" value="true"/> <code>captions=</code> <input type="text" value="en-US"/>

Reference:

<https://docs.microsoft.com/en-us/azure/azure-video-analyzer/video-analyzer-for-media-docs/video-indexer-embed-widgets>

82) You are developing an application to recognize employees' faces by using the Face Recognition API. Images of the faces will be accessible from a URI endpoint.

The application has the following code.

```
def add_face(subscription_key, person_group_id, person_id, image_uri):
    headers = {
        'Content-Type': 'application/json',
        'Ocp-Apim-Subscription-Key': subscription_key
    }
    body = {
        'url': image_uri
    }
    conn = httpplib.HTTPSConnection('westus.api.cognitive.microsoft.com')
    conn.request('POST',
        f'/face/v1.0/persongroups/{person_group_id}/persons/{person_id}/persistedFaces', f'{body}', headers)
    response = conn.getresponse()
    response_data = response.read()
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
The code will add a face image to a person object in a person group.	<input type="radio"/>	<input type="radio"/>
The code will work for up to 10,000 people.	<input type="radio"/>	<input checked="" type="radio"/>
add_face can be called multiple times to add multiple face images to a person object.	<input checked="" type="radio"/>	<input type="radio"/>

84) You are developing an application that will recognize faults in components produced on a factory production line. The components are specific to your business.

You need to use the Custom Vision API to help detect common faults.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions

Initialize the training dataset.

Train the object detection model.

Answer Area

Create a project.

Upload and tag images.

Train the classifier model.



Step 1: Create a project -

Create a new project.

Step 2: Upload and tag the images

Choose training images. Then upload and tag the images.

Step 3: Train the classifier model.

Train the classifier -

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/custom-vision-service/getting-started-build-a-classifier>

86) You have an Azure Video Analyzer for Media (previously Video Indexer) service that is used to provide a search interface over company videos on your company's website. You need to be able to search for videos based on who is present in the video. What should you do?

- A. Create a person model and associate the model to the videos.
- B. Create person objects and provide face images for each object.
- C. Invite the entire staff of the company to Video Indexer.
- D. Edit the faces in the videos.
- E. Upload names to a language model.

Correct Answer: A

Video Indexer supports multiple Person models per account. Once a model is created, you can use it by providing the model ID of a specific Person model when uploading/indexing or reindexing a video. Training a new face for a video updates the specific custom model that the video was associated with.

Note: Video Indexer supports face detection and celebrity recognition for video content. The celebrity recognition feature covers about one million faces based on commonly requested data source such as IMDB, Wikipedia, and top LinkedIn influencers. Faces that aren't recognized by the celebrity recognition feature are detected but left unnamed. Once you label a face with a name, the face and name get added to your account's Person model. Video Indexer will then recognize this face in your future videos and past videos.

Reference:

<https://docs.microsoft.com/en-us/azure/media-services/video-indexer/customize-person-model-with-api>

88) DRAG DROP -

You are developing a call to the Face API. The call must find similar faces from an existing list named employefaces. The employefaces list contains 60,000 images.

How should you complete the body of the HTTP request? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Values	Answer Area
"faceListId"	
"LargeFaceListId"	
"matchFace"	
"matchPerson"	

```
{  
    "faceId": "18c51a87-3a69-47a8-aedc-a54745f708a1",  
    "LargeFaceListId" : "employefaces",  
    "maxNumOfCandidatesReturned": 1,  
    "mode": "matchFace"  
}
```

Reference:

<https://docs.microsoft.com/en-us/rest/api/faceapi/face/findsimilar>

90) HOTSPOT -

You develop a test method to verify the results retrieved from a call to the Computer Vision API. The call is used to analyze the existence of company logos in images. The call returns a collection of brands named brands.

You have the following code segment.

```
for brand in image_analysis.brands:  
    if brand_confidence >= 0.75:  
        print(f"\nLogo of {brand_name} between {brand.rectangle_x}, {brand.rectangle.y} and  
{brand.rectangle.w}, {brand.rectangle.h}")
```

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 code will return the name of each detected brand with a confidence equal to or higher than 75 percent.

The code will return coordinates for the top-left corner of the rectangle that contains the brand logo of the displayed brands.

The code will return coordinates for the bottom-right corner of the rectangle that contains the brand logo of the displayed brands.

92) Your company uses an Azure Cognitive Services solution to detect faces in uploaded images. The method to detect the faces uses the following code.

```
static async Task DetectFaces(string imagePath)
{
    HttpClient client = new HttpClient();
    DefaultRequestHeaders.Add("Ocp-Apim-Subscription-Key", subscriptionKey);
    string requestParameter = "detectionModel=detection_01&returnFaceId=true&returnFaceLandmarks=false";
    string uri = endpoint + "/face/v1.0/detect?" + requestParameters;
    HttpResponseMessage response;
    byte[] byteData = GetImagesAsByteArray(imagePath);
    using (ByteArrayContent content = new ByteArrayContent(byteData))
    {
        Headers.ContentType = new MediaTypeHeaderValue("application/octet-stream");
        response = await PostAsync(uri, content);
        string contentString = await Content.ReadAsStringAsync();
        ProcessDetection(contentString);
    }
}
```

You discover that the solution frequently fails to detect faces in blurred images and in images that contain sideways faces. You need to increase the likelihood that the solution can detect faces in blurred images and images that contain sideways faces.

What should you do?

- A. Use a different version of the Face API.
- B. Use the Computer Vision service instead of the Face service.
- C. Use the Identify method instead of the Detect method.
- D. Change the detection model.

Correct Answer: D

<https://docs.microsoft.com/en-us/azure/cognitive-services/face/face-api-how-to-topics/specify-detection-model>

95) HOTSPOT -

You are building an app that will enable users to upload images. The solution must meet the following requirements:

- * Automatically suggest alt text for the images.
- * Detect inappropriate images and block them.
- * Minimize development effort.

You need to recommend a computer vision endpoint for each requirement.

What should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Generate alt text:

```
https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate  
https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image  
https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description
```

Detect inappropriate content:

```
https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate  
https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image  
https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description  
https://westus.api.cognitive.microsoft.com/vision/v3.2/describe?maxCandidates=1
```

96) You need to build a solution that will use optical character recognition (OCR) to scan sensitive documents by using the Computer Vision API. The solution must NOT be deployed to the public cloud. What should you do?

- A. Build an on-premises web app to query the Computer Vision endpoint.
- B. Host the Computer Vision endpoint in a container on an on-premises server.
- C. Host an exported Open Neural Network Exchange (ONNX) model on an on-premises server.
- D. Build an Azure web app to query the Computer Vision endpoint.

Correct Answer: B

One option to manage your Computer Vision containers on-premises is to use Kubernetes and Helm.

Three primary parameters for all Cognitive Services containers are required. The Microsoft Software License Terms must be present with a value of accept. An

Endpoint URI and API key are also needed.

Incorrect:

Not D: This Computer Vision endpoint would be available for the public, unless it is secured.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/deploy-computer-vision-on-premises>

98) You have a library that contains thousands of images.

You need to tag the images as photographs, drawings, or clipart.

Which service endpoint and response property should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Service endpoint:

- Computer Vision analyze images
- Computer Vision object detection
- Custom Vision image classification
- Custom Vision object detection

Property:

- categories
- description
- imageType
- metadata
- objects

99) You have an app that captures live video of exam candidates.

You need to use the Face service to validate that the subjects of the videos are real people.

What should you do?

- A. Call the face detection API and retrieve the face rectangle by using the FaceRectangle attribute.
- B. Call the face detection API repeatedly and check for changes to the FaceAttributes.HeadPose attribute.
- C. Call the face detection API and use the FaceLandmarks attribute to calculate the distance between pupils.
- D. Call the face detection API repeatedly and check for changes to the FaceAttributes.Accessories attribute.

Correct Answer: B

101) You need to analyze video content to identify any mentions of specific company names.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Add the specific company names to the exclude list.

Add the specific company names to the include list.

From Content model customization, select **Language**.

Sign in to the Custom Vision website.

Sign in to the Azure Video Analyzer for Media website.

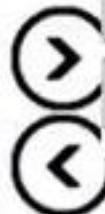
From Content model customization, select **Brands**.

Answer Area

Sign in to the Azure Video Analyzer for Media website.

From Content model customization, select **Brands**.

Add the specific company names to the include list.



104) You develop a test method to verify the results retrieved from a call to the Computer Vision API. The call is used to analyze the existence of company logos in images. The call returns a collection of brands named brands. You have the following code segment.

```
foreach (var brand in brands)
{
    if (brand.Confidence >= .75)
        Console.WriteLine($"Logo of {brand.Name} between {brand.Rectangle.X}, {brand.Rectangle.Y} and {brand.Rectangle.W},
{brand.Rectangle.H}");
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
The code will display the name of each detected brand with a confidence equal to or higher than 75 percent.	<input type="radio"/>	<input type="radio"/>
The code will display coordinates for the top-left corner of the rectangle that contains the brand logo of the displayed brands.	<input type="radio"/>	<input type="radio"/>
The code will display coordinates for the bottom-right corner of the rectangle that contains the brand logo of the displayed brands.	<input type="radio"/>	<input type="radio"/>

105) You have a factory that produces cardboard packaging for food products. The factory has intermittent internet connectivity.

The packages are required to include four samples of each product.

You need to build a Custom Vision model that will identify defects in packaging and provide the location of the defects to an operator. The model must ensure that each package contains the four products.

Which project type and domain should you use? To answer, drag the appropriate options to the correct targets. Each option may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

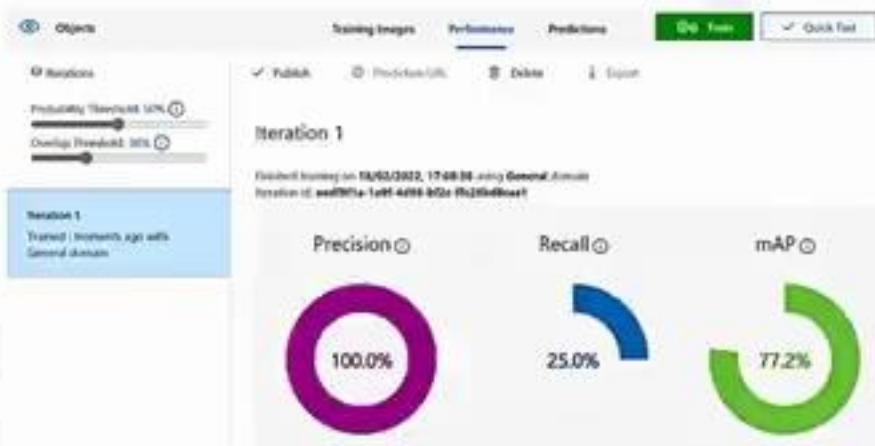
Options	Answer Area
Food	
General	Project type: <input type="text"/>
General (compact)	
Image classification	Domain: <input type="text"/>
Logo	
Object detection	

106) You are building a model to detect objects in images.

The performance of the model based on training data is shown in the following exhibit.

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.



Answer Area

The percentage of false positives is [answer choice].

0
25
30
50
100

The value for the number of true positives divided by the total number of true positives and false negatives is [answer choice] %.

0
25
30
50
100

107) You are building an app that will include one million scanned magazine articles. Each article will be stored as an image file.

You need to configure the app to extract text from the images. The solution must minimize development effort.

What should you include in the solution?

- A. Computer Vision Image Analysis
- B. the Read API in Computer Vision
- C. Form Recognizer
- D. Azure Cognitive Service for Language

Correct Answer: B

109) You build a language model by using a Language Understanding service. The language model is used to search for information on a contact list by using an intent named FindContact.

A conversational expert provides you with the following list of phrases to use for training.

- ☞ Find contacts in London.
- ☞ Who do I know in Seattle?
- ☞ Search for contacts in Ukraine.

You need to implement the phrase list in Language Understanding.

Solution: You create a new pattern in the FindContact intent.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Instead use a new intent for location.

Note: An intent represents a task or action the user wants to perform. It is a purpose or goal expressed in a user's utterance.

Define a set of intents that corresponds to actions users want to take in your application.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-concept-intent>

110) You develop an application to identify species of flowers by training a Custom Vision model.
You receive images of new flower species.
You need to add the new images to the classifier.
Solution: You add the new images, and then use the Smart Labeler tool.
Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

The model need to be extended and retrained.

Note: Smart Labeler to generate suggested tags for images. This lets you label a large number of images more quickly when training a Custom Vision model.

111) You develop an application to identify species of flowers by training a Custom Vision model.

You receive images of new flower species.

You need to add the new images to the classifier.

Solution: You add the new images and labels to the existing model. You retrain the model, and then publish the model.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

The model needs to be extended and retrained.

113) HOTSPOT -

You are developing a service that records lectures given in English (United Kingdom).

You have a method named AppendToTranscriptFile that takes translated text and a language identifier.

You need to develop code that will provide transcripts of the lectures to attendees in their respective language. The supported languages are English, French,

Spanish, and German.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
static async Task TranslateSpeechAsync()
{
    var config = SpeechTranslationConfig.FromSubscription("69cad5cc-0ab3-4704-bdff-afbf4aa07d85", "uksouth");

    var lang = new List<string>
    {
        {"en-GB"}
        {"fr", "de", "es"}
        {"French", "Spanish", "German"}
        {languages}
    };

    config.SpeechRecognitionLanguage = "en-GB";
    lang.ForEach(config.AddTargetLanguage);

    using var audioConfig = AudioConfig.FromDefaultMicrophoneInput();
    using var recognizer = new (config, audioConfig)
    {
        IntentRecognizer
        SpeakerRecognizer
        SpeechSynthesizer
        TranslationRecognizer
    };

    var result = await recognizer.RecognizeOnceAsync();
    if (result.Reason == ResultReason.TranslatedSpeech)
```

113) HOTSPOT -

You are developing a service that records lectures given in English (United Kingdom).

You have a method named AppendToTranscriptFile that takes translated text and a language identifier.

You need to develop code that will provide transcripts of the lectures to attendees in their respective language. The supported languages are English, French,

Spanish, and German.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
static async Task TranslateSpeechAsync()
{
    var config = SpeechTranslationConfig.FromSubscription("69cad5cc-0ab3-4704-bdff-afbf4aa07d85", "ukouth");
    var lang = new List<string>
    {
        ("en-GB")
        ("fr", "de", "es")
        ("French", "Spanish", "German")
        (languages)
    };

    config.SpeechRecognitionLanguage = "en-GB";
    lang.ForEach(config.AddTargetLanguage);

    using var audioConfig = AudioConfig.FromDefaultMicrophoneInput();
    using var recognizer = new TranslationRecognizer(config, audioConfig);
    var result = await recognizer.RecognizeOnceAsync();
    if (result.Reason == ResultReason.TranslatedSpeech)
```

117) HOTSPOT -

You are developing an application that includes language translation.

The application will translate text retrieved by using a function named `getTextToBeTranslated`. The text can be in one of many languages. The content of the text must remain within the Americas Azure geography.

You need to develop code to translate the text to a single language.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
...  
var endpoint =  
    "https://api.cognitive.microsofttranslator.com/translate"  
    "https://api.cognitive.microsofttranslator.com/transliterate"  
    "https://api-apc.cognitive.microsofttranslator.com/detect"  
    "https://api-nam.cognitive.microsofttranslator.com/detect"  
    "https://api-nam.cognitive.microsofttranslator.com/translate"
```

```
var apiKey = "FF956C68B83821838691ABD200A4C606";  
var text = getTextToBeTranslated();  
var body = '[{"Text":"' + text + '"}]';  
var client = new HttpClient();  
client.DefaultRequestHeaders.Add("Ocp-Apim-Subscription-Key", apiKey);
```

```
var uri = endpoint + "?from=en";  
var uri = endpoint + "?suggestedFrom=en";  
var uri = endpoint + "?to=en";
```

```
HttpResponseMessage response;  
var content = new StringContent(body, Encoding.UTF8, "application/json");  
var response = await client.GetAsync(uri, content);  
...
```

119) HOTSPOT -

You run the following command.

```
docker run --rm -it -p 5000:5000 --memory 10g --cpus 2 \
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment\
Eula=accept \
Billing=(ENDPOINT_URI) \
ApiKey=(API_KEY)
```

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
Going to http://localhost:5000/status will query the Azure endpoint to verify whether the API key used to start the container is valid.	<input checked="" type="radio"/>	<input type="radio"/>
The container logging provider will write log data.	<input checked="" type="radio"/>	<input type="radio"/>
Going to http://localhost:5000/swagger will provide the details to access the documentation for the available endpoints.	<input checked="" type="radio"/>	<input type="radio"/>

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-container-howto>

121) You need to upload speech samples to a Speech Studio project for use in training.
How should you upload the samples?

- A. Combine the speech samples into a single audio file in the .wma format and upload the file.
- B. Upload a .zip file that contains a collection of audio files in the .wav format and a corresponding text transcript file.
- C. Upload individual audio files in the FLAC format and manually upload a corresponding transcript in Microsoft Word format.
- D. Upload individual audio files in the .wma format.

Correct Answer: B

To upload your data, navigate to the Speech Studio . From the portal, click Upload data to launch the wizard and create your first dataset. You'll be asked to select a speech data type for your dataset, before allowing you to upload your data. The default audio streaming format is WAV

Use this table to ensure that your audio files are formatted correctly for use with Custom Speech:

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/how-to-custom-speech-test-and-train>

122) You are developing a method for an application that uses the Translator API.

The method will receive the content of a webpage, and then translate the content into Greek (el). The result will also contain a transliteration that uses the Roman alphabet.

You need to create the URI for the call to the Translator API.

You have the following URI.

<https://api.cognitive.microsofttranslator.com/translate?api-version=3.0>

Which three additional query parameters should you include in the URI? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. toScript=Cyril
- B. from=el
- C. textType=html
- D. to=el
- E. textType=plain
- F. toScript=Latn

Correct Answer: CDF

C: textType is an optional parameter. It defines whether the text being translated is plain text or HTML text (used for web pages).

D: to is a required parameter. It specifies the language of the output text. The target language must be one of the supported languages included in the translation scope.

F: toScript is an optional parameter. It specifies the script of the translated text.

We use Latin (Roman alphabet) script.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate>

124) DRAG DROP -

You are building a retail chatbot that will use a QnA Maker service.

You upload an internal support document to train the model. The document contains the following question: "What is your warranty period?"

Users report that the chatbot returns the default QnA Maker answer when they ask the following question: "How long is the warranty coverage?"

The chatbot returns the correct answer when the users ask the following question: "What is your warranty period?"

Both questions should return the same answer.

You need to increase the accuracy of the chatbot responses.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions

Answer Area

Add a new question and answer (QnA) pair.

Add alternative phrasing to the question and answer (QnA) pair.

Retrain the model.

Retrain the model.

Add additional questions to the document.

Republish the model.

Republish the model.

Add alternative phrasing to the question and answer (QnA) pair.

125) You build a language model by using a Language Understanding service. The language model is used to search for information on a contact list by using an intent named FindContact.

A conversational expert provides you with the following list of phrases to use for training.

- Find contacts in London.
- Who do I know in Seattle?
- Search for contacts in Ukraine.

You need to implement the phrase list in Language Understanding.

Solution: You create a new intent for location.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

126) You build a language model by using a Language Understanding service. The language model is used to search for information on a contact list by using an intent named FindContact.

A conversational expert provides you with the following list of phrases to use for training.

Find contacts in London.

Who do I know in Seattle?

Search for contacts in Ukraine.

You need to implement the phrase list in Language Understanding.

Solution: You create a new entity for the domain.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

128) DRAG DROP -

You are building a Language Understanding model for purchasing tickets.

You have the following utterance for an intent named PurchaseAndSendTickets.

Purchase [2 audit business] tickets to [Paris] [next Monday] and send tickets to [email@domain.com]

You need to select the entity types. The solution must use built-in entity types to minimize training data whenever possible.

Which entity type should you use for each label? To answer, drag the appropriate entity types to the correct labels. Each entity type may be used once, more than once, or not at all.

You may need to drag the split bar between panes or scroll to view content.

Select and Place:

Entity Types	Answer Area
Email	
List	Paris: GeographyV2
Regex	email@domain.com: Email
GeographyV2	2 audit business: Machine learned
Machine learned	

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-reference-prebuilt-geographyv2>

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-reference-prebuilt-email>

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/reference-entity-machine-learned-entity>

129) You have the following C# method.

```
static void create_resource(string resource_name, string kind, string account_tier, string location)
{
    CognitiveServicesAccount parameters =
        new CognitiveServicesAccount(null, null, kind, location, resource_name, new CognitiveServicesAccountProperties(), new Sku(account_tier));
    var result = cog_svc_client.Accounts.Create(resource_group_name, account_tier, parameters);
}
```

You need to deploy an Azure resource to the East US Azure region. The resource will be used to perform sentiment analysis.

How should you call the method?

- A. create_resource("res1", "ContentModerator", "S0", "eastus")
- B. create_resource("res1", "TextAnalytics", "S0", "eastus")
- C. create_resource("res1", "ContentModerator", "Standard", "East US")
- D. create_resource("res1", "TextAnalytics", "Standard", "East US")

Correct Answer: B

To perform sentiment analysis, we specify TextAnalytics, not ContentModerator.

Possible SKU names include: 'F0','F1','S0','S1','S2','S3','S4','S5','S6','S7','S8'

Possible location names include: westus, eastus

Reference:

<https://docs.microsoft.com/en-us/powershell/module/az.cognitiveservices/new-azcognitiveservicesaccount>

130) You build a Conversational Language Understanding model by using the Language Services portal. You export the model as a JSON file as shown in the following sample.

To what does the Weather.Historic entity correspond in the utterance?

- A. by month
- B. chicago
- C. rain
- D. location

```
{  
    "text": "average amount of rain by month at chicago last year",  
    "intent": "Weather.CheckWeatherValue",  
    "entities": [  
        {  
            "entity": "Weather.WeatherRange",  
            "startPos": 0,  
            "endPos": 6,  
            "children": []  
        },  
        {  
            "entity": "Weather.WeatherCondition",  
            "startPos": 10,  
            "endPos": 21,  
            "children": []  
        },  
        {  
            "entity": "Weather.Historic",  
            "startPos": 23,  
            "endPos": 30,  
            "children": []  
        }  
    ]  
}
```

Correct Answer: A

131) You are examining the Text Analytics output of an application.

The text analyzed is: `Our tour guide took us up the Space Needle during our trip to Seattle last week.'

The response contains the data shown in the following table.

Text	Category	ConfidenceScore
Tour guide	PersonType	0.45
Space Needle	Location	0.38
Trip	Event	0.78
Seattle	Location	0.78
Last week	DateTime	0.80

Which Text Analytics API is used to analyze the text?

- A. Entity Linking
- B. Named Entity Recognition
- C. Sentiment Analysis
- D. Key Phrase Extraction

Correct Answer: B

Named Entity Recognition (NER) is one of the features offered by Azure Cognitive Service for Language, a collection of machine learning and AI algorithms in the cloud for developing intelligent applications that involve written language. The NER feature can identify and categorize entities in unstructured text. For example: people, places, organizations, and quantities.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/language-service/named-entity-recognition/overview>

132) SIMULATION -

You need to configure and publish bot12345678 to support task management. The intent must be named TaskReminder. The LUDown for the intent is in the C:\Resources\LU folder.

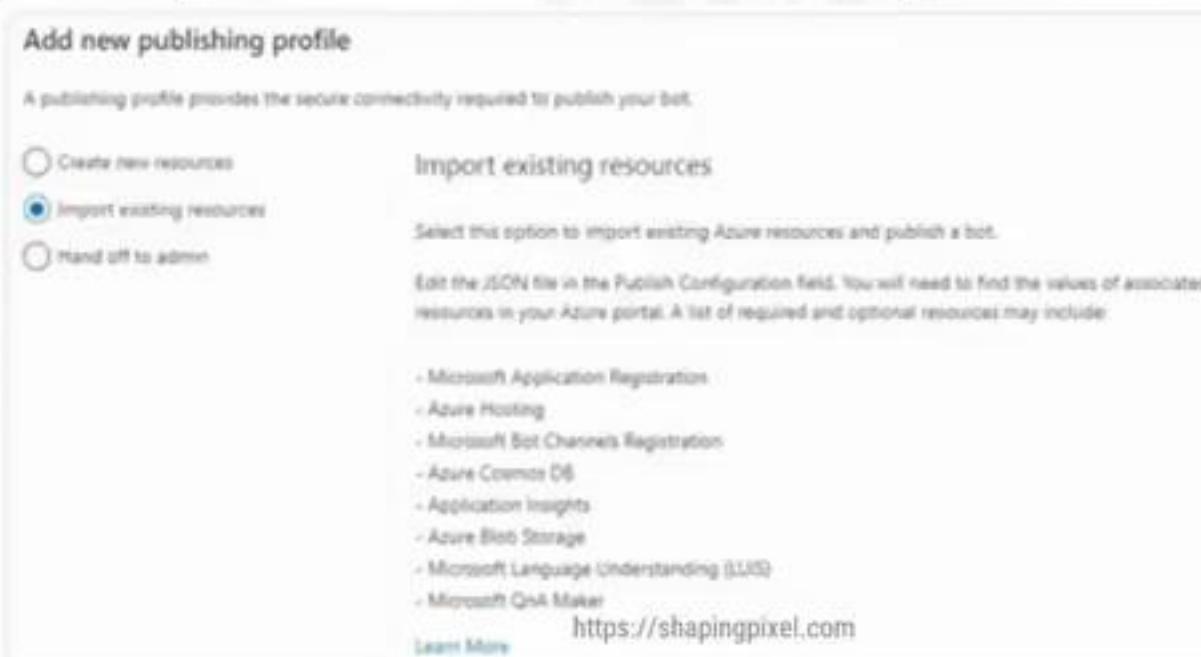
To complete this task, use the Microsoft Bot Framework Composer.

Correct Answer: See explanation below.

Step 1: Open Microsoft Bot Framework Composer

Step 2: Select the bot bot12345678

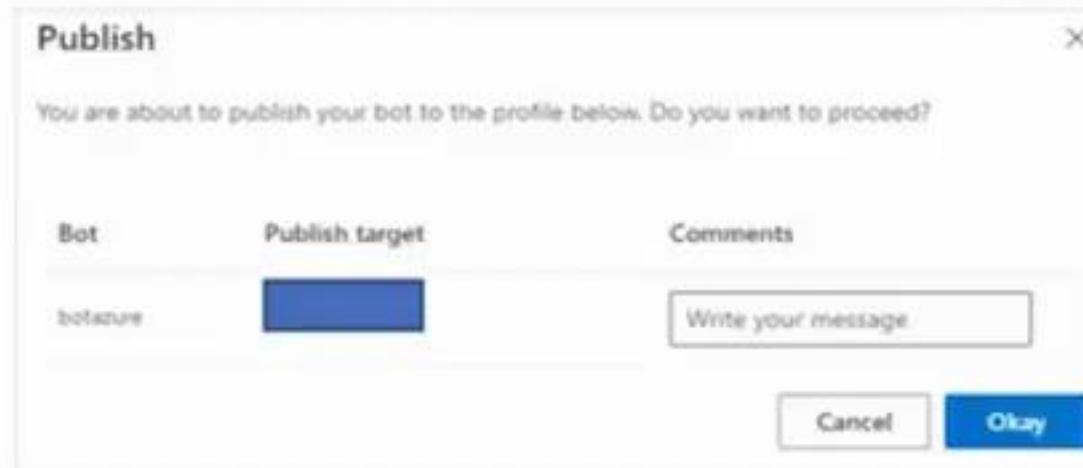
Step 3: Select Import existing resources. Read the instructions on the right side of the screen and select Next.



Step 4: Browse to the C:\Resources\LU folder and select the available .lu file

Step 5: In the pop-up window Importing existing resources, modify the JSON file content based on your resources information: Name the intent TaskReminder

Step 6: Select Publish from the Composer menu. In the Publish your bots pane, select the bot to publish (bot12345678), then select a publish profile from the Publish target drop-down list.



Reference:

<https://docs.microsoft.com/en-us/composer/how-to-publish-bot>

133) SIMULATION -

You need to configure bot12345678 support the French (FR-FR) language.

Export the bot to C:\Resources\Bot\Bot1.zip.

To complete this task, use the Microsoft Bot Framework Composer.

Correct Answer: See explanation below.

Step 1: Open Microsoft Bot Framework Composer

Step 2: Select the bot bot12345678

Step 3: Select Configure.

Step 4: Select the Azure Language Understanding tab

Step 5: Select the Set up Language Understanding button. The Set up Language Understanding window will appear, shown below:

Set up Language Understanding

X

To understand natural language input and direct the conversation flow, your bot needs a language understanding service. [Learn more](#)

Use existing resources

Create and configure new Azure resources

Generate instructions for Azure administrator

Next

Cancel

134) You have the following data sources:

- ⇒ Finance: On-premises Microsoft SQL Server database
- ⇒ Sales: Azure Cosmos DB using the Core (SQL) API
- ⇒ Logs: Azure Table storage
- ⇒ HR: Azure SQL database

You need to ensure that you can search all the data by using the Azure Cognitive Search REST API.

What should you do?

- A. Migrate the data in HR to Azure Blob storage.
- B. Migrate the data in HR to the on-premises SQL server.
- C. Export the data in Finance to Azure Data Lake Storage.
- D. Ingest the data in Logs into Azure Sentinel.

Correct Answer: C

In Azure Cognitive Search, a data source is used with indexers, providing the connection information for ad hoc or scheduled data refresh of a target index, pulling data from supported Azure data sources.

Reference:

<https://docs.microsoft.com/en-us/azure/search/search-indexer-overview#supported-data-sources>

136) SIMULATION -

Use the following login credentials as needed:

To enter your username, place your cursor in the Sign in box and click on the username below.

To enter your password, place your cursor in the Enter password box and click on the password below.

Azure Username: admin@abc.com -

Azure Password: XXXXXXXXXXXX -

The following information is for technical support purposes only:

Lab Instance: 12345678 -

Task -

You need to create a version of the 1u12345678 Language Understanding (classic) model. The new version must have a version name of 1.0 and must be active.

To complete this task, sign in to the Language Understanding portal at <https://www.luis.ai/>.

137) You have a Language service resource that performs the following:

- Sentiment analysis
- Named Entity Recognition (NER)
- Personally Identifiable Information (PII) identification

You need to prevent the resource from persisting input data once the data is analyzed.

Which query parameter in the Language service API should you configure?

- A. model-version
- B. piiCategories
- C. showStats
- D. loggingOptOut

Correct Answer: D

138) You have an Azure Cognitive Services model named Model1 that identifies the intent of text input. You develop an app in C# named App1. You need to configure App1 to use Model1. Which package should you add to App1?

- A. Universal.Microsoft.CognitiveServices.Speech
- B. SpeechServicesToolkit
- C. Azure.AI.Language.Conversations
- D. Xamarin.Cognitive.Speech

Correct Answer: C

SIMULATION –

You need to configure and publish bot12345678 to answer questions by using the frequently asked questions (FAQ) located at <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-resources-bot-framework-faq>. The solution must use bot%@lab.LabInstance.Id-qna-qna%.

To complete this task, use the Microsoft Bot Framework Composer.

Correct Answer: See explanation below.

Step 1: Open Microsoft Bot Framework Composer

Step 2: Select the bot bot12345678

Step 3: Open the Configure page in Composer. Then select the Development resources, and scroll down to Azure QnA Maker.

Step 4: To access the Connect to QnA Knowledgebase action, you need to select + under the node you want to add the QnA knowledge base and then select Connect to QnAKnowledgeBase from the Access external resources action menu.

141) HOTSPOT -

You are developing an application that includes language translation.

The application will translate text retrieved by using a function named `get_text_to_be_translated`. The text can be in one of many languages. The content of the text must remain within the Americas Azure geography.

You need to develop code to translate the text to a single language.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
    ...
    api_key = "FF956C68B83B21B38691ABD200A4C606"
    text = get_text_to_be_translated()
    headers = {
        'Content-Type': 'application/json',
        'Ocp-Apim-Subscription-Key': api_key
    }
    body = {
        'Text': text
    }
    conn = httplib.HTTPSConnection
```

("api.cogninve.microsofttranslator.com")
("api-apc.cognitive.microsofttranslator.com")
("api-nam.cognitive.microsofttranslator.com")

```
conn.request("POST",
            str(body), headers)
```

"/translate?from=en"
"/translate?suggestedFrom=en"
"/translate?to=en"
"/detect?to=en"
"/detect?from=en"

```
response = conn.getresponse()
response_data = response.read()
    ...
```

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-reference>

<https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate>

143) You are building a social media extension that will convert text to speech. The solution must meet the following requirements:

- Support messages of up to 400 characters.
- Provide users with multiple voice options.
- Minimize costs.

You create an Azure Cognitive Services resource.

Which Speech API endpoint provides users with the available voice options?

- A. <https://uksouth.api.cognitive.microsoft.com/speechtotext/v3.0/models/base>
- B. <https://uksouth.customvoice.api.speech.microsoft.com/api/texttospeech/v3.0/longaudiosynthesis/voices>
- C. <https://uksouth.tts.speech.microsoft.com/cognitiveservices/voices/list>
- D. <https://uksouth.voice.speech.microsoft.com/cognitiveservices/v1?deploymentId={deploymentId}>

Answer: C

Explanation:

The question is about providing users with all the available voice options.

Get a list of voices

You can use the tts.speech.microsoft.com/cognitiveservices/voices/list endpoint to get a full list of voices for a specific region or endpoint.

Reference:

<https://learn.microsoft.com/en-us/azure/cognitive-services/speech-service/rest-text-to-speech?tabs=streaming>

146) You have been asked to build an application that recognizes intents in audio captured from a microphone using exclusively Azure AI Services.

Which combination of the following services can you use to fulfill the requirements? (Choose 2 answers)

- A. Azure AI Translator
- B. Conversational Language Understanding (CLU)
- C. Azure AI Immersive Reader
- D. Azure AI Speech Service

Answer: BD

Intent recognition with the CLU services enables real-time transcription of audio streams into text while identifying intent and entities.

[https://learn.microsoft.com/en-us/azure/ai-services/language-service/conversational-language-understanding/overview, opens in a new tab](https://learn.microsoft.com/en-us/azure/ai-services/language-service/conversational-language-understanding/overview)

147) You are working with Azure AI Language Preconfigured Name Entity Recognition (NER) features. Which choices belong to general entity categories offered by the service? (Choose 3 answers)

- A. Person
- B. Event
- C. Location
- D. Social

Answer: ABC

Named Entity Recognition (NER) is one of the features offered by Azure AI Language, a collection of machine learning and AI algorithms in the cloud for developing intelligent applications that involve written language. The NER feature can identify and categorize entities in unstructured text. For example: people, places, organizations, and quantities.

<https://learn.microsoft.com/en-us/azure/ai-services/language-service/named-entity-recognition/overview>,
opens in a new tab

148) You are enriching your Azure Cognitive Search service with knowledge store projections. The main requirement is to save the image extracted from the documents.

Which type of projection you need to use?

- A. Tables
- B. Objects
- C. Files
- D. Message

Answer: C

Tables: For data that's best represented as rows and columns, table projections allow you to define a schematized shape or projection in Table storage. Only valid JSON objects can be projected as tables, the enriched document can contain nodes that are not named JSON objects and when projecting these objects, create a valid JSON object with a shaper skill or inline shaping.

Objects: When you need a JSON representation of your data and enrichments, object projections are saved as blobs. Only valid JSON objects can be projected as objects, the enriched document can contain nodes that are not named JSON objects and when projecting these objects, create a valid JSON object with a shaper skill or inline shaping.

Files: When you need to save the images extracted from the documents, file projections allow you to save the normalized images to blob storage.

<https://docs.microsoft.com/en-us/azure/search/knowledge-store-projection-overview>, opens in a new tab

149) You have been asked to develop a real-time speech-to-speech translation prototype that will be showcased in the next corporate webinar. The prototype will translate conversational English to Spanish, French, and Italian for now. What is the most suitable approach to follow?

- A. Develop one app using Azure AI Translator and select translation of English into Spanish, French, and Italian.
- B. Develop one app using the Speech Service SDK and add Spanish, French, and Italian as target translation languages.
- C. Develop separate apps using the Speech Service SDK to translate English into one of the three target languages.
- D. Develop one app to convert the speech to text using the Speech Service SDK, translate the speech with Azure AI Translator, and then read the translations with Azure AI Immersive Reader.

Answer: B

With Azure AI Speech, a common task of speech-to-speech translation is to specify target translation languages, at least one is required but multiples are supported.

<https://learn.microsoft.com/en-us/azure/ai-services/speech-service/get-started-speech-translation?tabs=windows%2Cterminal&pivots=programming-language-csharp>

150) After your company's call center support staff receive a call, you need to implement an AI solution to identify additional metrics.

The solution requires:

- Processing speech in English, French, and Spanish.
- Identifying the main topics of customer calls, and
- Implementing sentiment analysis

Which of the following Azure AI services does this solution require? (Choose 2 answers)

- A. Azure AI Speech service's Speech-to-Text
- B. Azure AI Speech service's Text-to-Speech
- C. Azure AI Translator
- D. Azure AI Language

Answer: AD

Speech-to-text transcribes or translates audio streams or local files to text in real-time that your applications, tools, or devices can consume or display.

Azure AI Language is a cloud-based service that provides Natural Language Processing (NLP) features for text mining and text analysis, including: sentiment analysis, opinion mining, key phrase extraction, language detection, and named entity recognition.

<https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/overview>, opens in a new tab

151) You are training a Conversational Language Understanding (CLU) application. After you finish training a CLU app, it receives a prediction score of 0.01. How can you describe the result?

- A. A definite failure to match
- B. A high-confidence, low-error model
- C. A low-confidence, high-error model
- D. A definite match

Answer: C

A prediction score indicates the degree of confidence CLU has for the prediction results of a user utterance. A prediction score is between zero (0) and one (1). An example of a highly confident LCU score is 0.99. An example of a score of low confidence is 0.01.

<https://learn.microsoft.com/en-us/legal/cognitive-services/clu/clu-characteristics-and-limitations>, opens in a new tab

152) Your company decided to use the Azure AI Vision to analyze images for insights extraction. Given a set of input parameters, such as region/transactions and required features, you have been asked to estimate the upfront and recurring fees for implementing and using this service in a production-level environment. How could you estimate costs?

- A. Collect the required features/inputs elements and send a request to Azure support.
- B. Use the Azure Price Calculator to estimate costs.
- C. Create the resources, send sample traffic, and then extrapolate costs using Cost Analysis in the Azure Portal.
- D. Hire a specialized firm for an accurate estimation.

Answer: B

use the Azure Price Calculator to plan Azure AI costs before adding resources for the service to the estimated costs. Then, when you add the Azure resources, review the estimated costs. Once you have started using Azure AI resources (e.g. Speech, Azure AI Vision, Translator, etc.), use the features of Cost Management to set budgets and monitor costs.
<https://docs.microsoft.com/azure/cognitive-services/plan-manage-costs>, opens in a new tab

153) You developed a chatbot using Conversational Language Understanding (CLU) and published it. The end user interacts with the bot by sending inputs to be interpreted by the application and receiving responses. What is the exact nomination of those inputs?

- A. Utterances
- B. Intents
- C. Entities
- D. Patterns

Answer: C

Luis makes use of three key aspects for understanding language:

- Utterances: An utterance is input from the user that your app needs to interpret.
- Intents: An intent represents a task or action the user wants to do. It's a purpose or goal expressed in a user's utterance.
- Entities: An entity represents a word or phrase inside the utterance that you want to extract.

<https://docs.microsoft.com/en-in/azure/cognitive-services/luis/luis-concept-utterance>, opens in a new tab

154) You are using the Speech SDK to access the speech service for an application in development. During the tests, you noticed that attempts to connect frequently result in HTTP 403 Forbidden and HTTP 401 Unauthorized errors. What could be the root cause of the 403 errors? (Choose 3 answers)

- A. The subscription key is missing.
- B. The subscription usage quota exceeded.
- C. The endpoint is invalid.
- D. The subscription key is invalid.

Answer: ABD

This error often is caused by authentication issues. Connection requests without a valid Ocp-Apim-Subscription-Key or Authorization header are rejected with a status of 403 or 401.

If you're using a subscription key for authentication, you might see the error because:

- The subscription key is missing or invalid
- You have exceeded your subscription's usage quota

If you had an invalid endpoint, you would receive an **Error: WebSocket Upgrade failed with an authentication error (403)** message.

<https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/troubleshooting>, opens in a new tab

155) A developer is working with Azure Cognitive Search and wants to enhance the current pipeline by adding searchable content out of raw unstructured text in multiple languages and apply language detection and translation. What is the most appropriate approach to fulfill those requirements?

- A. Use AI Enrichment with custom skills to integrate with Translator and Computer Vision API.
- B. Train and deploy custom models for language detection and translation, then use AI Enrichment to call those APIs.
- C. Use AI Enrichment with built-in skills for language detection and translation.
- D. Train and deploy custom models for language detection and translation then call those API right after the source documents are 'cracked.'

Answer: C

Using built-in cognitive skills is the appropriate choice if your raw content is unstructured text, image content, or content that needs language detection and translation. Applying AI through built-in cognitive skills can unlock this content, increasing its value and utility in your search and data science apps.

<https://docs.microsoft.com/en-us/azure/search/cognitive-search-concept-intro>, opens in a new tab

157) You want to classify URL-based images using Custom Vision Prediction API. Review the following Python 3 code fragment.

```
import http.client, urllib.request, urllib.parse, urllib.error, base64

headers = {
    'Content-Type': 'application/json',
    'Prediction-Key': '{prediction key}',
}

body = "{\"Url\" : \" " + url + " \"}"

try:
    conn = http.client.HTTPSConnection('southcentralus.api.cognitive.microsoft.com')
    conn.request("POST", "/customvision/v3.0/Prediction/{projectId}/{PROJECT_TYPE}/iterations/{iterationName}/{IMAGE_TYPE}", body, headers)
    response = conn.getresponse()
    data = response.read()
    print(data)
    conn.close()
except Exception as e:
    print("[Errno {0}] {1}".format(e errno, e.strerror))
```

What parameters should replace PROJECT_TYPE and IMAGE_TYPE in this code snippet?

- A. Enter 'classify' for {PROJECT_TYPE} parameter and enter 'url' for the {IMAGE_TYPE} parameter.
- B. Enter 'detect' for the {PROJECT_TYPE} parameter and enter 'image' for the {IMAGE_TYPE} parameter.
- C. Enter 'classify' for the {PROJECT_TYPE} parameter and enter 'image' for the {IMAGE_TYPE} parameter.
- D. Enter 'detect' for the {PROJECT_TYPE} parameter and 'url' for the {IMAGE_TYPE} parameter.

Answer: A

158) Which of the following techniques is not used for natural language processing?

- A. Tokenization
- B. Stemming
- C. Lemmatization
- D. Optical Character Recognition

Answer: D

When using NLP to extract information and insight from free-form text, the starting point is typically the raw documents stored in object storage such as Azure Storage or Azure Data Lake Store.

These approaches use many techniques from natural language processing, such as:

- Tokenizer - Splitting the text into words or phrases.
- Stemming and lemmatization - Normalizing words so that different forms map to the canonical word with the same meaning. For example, "running" and "ran" map to "run".
- Entity extraction - Identifying subjects in the text.
- Part of speech detection - Identifying text as a verb, noun, participle, verb phrase, and so on.
- Sentence boundary detection - Detecting complete sentences within paragraphs of text.

<https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/natural-language-processing>

160) You have been asked by your management to process all internal such as documents, contracts, and invoices. This process needs to identify and classify personal and sensitive information that may exist to be compliant with the regulation and respect customer privacy.

What is the most suitable approach to use?

- A. Develop a custom machine learning model to identify efficiently personal info and sensitive data.
- B. Use Computer Vision Optical Character Recognition and custom scripts using heuristics.
- C. Use the Azure AI Language Named Entity Recognition (NER) to identify personal info and classify the documents.
- D. Process the documents by integrating the Text Analytics Key Phrases API with Power BI.

Answer:C

Azure AI Language is a cloud-based service that provides Natural Language Processing (NLP) features for text mining and text analysis, including sentiment analysis, opinion mining, key phrase extraction, language detection, and named entity recognition.

<https://learn.microsoft.com/en-us/azure/ai-services/language-service/named-entity-recognition/overview>, opens in a new tab

161) Your company must process hundreds of sales receipts manually and wants to automate the process. All the receipts are available in JPEG and PDF format and 2-3 MB in size. You decided to choose an Azure AI service for such cases.

What is the most appropriate service to use?

- A. Azure AI Vision
- B. Azure AI Custom Vision
- C. Azure AI Document Intelligence
- D. Azure AI Personalizer

Answer: C

Azure AI Document Intelligence can analyze and extract information from sales receipts using its prebuilt receipt model. It combines our powerful Optical Character Recognition (OCR) capabilities with deep learning models to extract key information from receipts written in English.

<https://docs.microsoft.com/en-us/azure/cognitive-services/form-recognizer/concept-receipts>, opens in a new tab

162) You received a business requirement from the marketing department for building a Chatbot as a new customer communication channel via social media.

The Chatbot needs to be able to respond to customer questions in natural language using the existing knowledge base published on the company's FAQ webpage.

Which Azure service would you use to accomplish this task? (Choose 2 answers)

- A. Q&A Maker
- B. Azure Bot Service
- C. Bing Search Service
- D. Text Analytics

Answer: AB

Azure Q&A Maker lets you build a searchable knowledge base by importing a set of questions and answers.

The Azure Bot Service lets you create various types of bots. it can be configured to work with other Azure services such as Q&A Maker.

<https://docs.microsoft.com/en-us/azure/cognitive-services/qnamaker/overview/overview>, opens in a new tab

163) You just received the results of the customer experience tests campaign for a recently released Conversational Language Understanding (CLU) app. You notice that the majority of the feedback is about inaccurate responses given to the customers.

What modifications could you implement to enhance the prediction accuracy of the CLU app? (Choose 2 answers)

- A. Enable active learning for the current application.
- B. Build a new version of the application with a collection of 'good' utterances.
- C. Add entity roles to your CLU application.
- D. Duplicate the utterances for your CLU application.

Answer: A

Active learning is one of three strategies to improve prediction accuracy and is the easiest to implement. With active learning, you review endpoint utterances for correct intent and entity. CLU chooses endpoint utterances it is unsure of.

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/luis-how-to-model-intent-pattern>, opens in a new tab

164) Which of the following scenarios is not suited for built-in skills for Azure Cognitive Search?

- A. Scanned documents (JPEG) that you want to make full-text searchable.
- B. Multi-lingual content against which you want to apply language detection and possibly text translation.
- C. Unstructured or semi-structured documents containing content that has inherent meaning or context that is hidden in the larger document.
- D. Identify and extract text, key-value pairs, selection marks, or tables from your documents as forms.

Answer: D

A skillset that's assembled using built-in skills is well suited for the following application scenarios:

- Scanned documents (JPEG) that you want to make full-text searchable. You can attach an optical character recognition (OCR) skill to identify, extract, and ingest text from JPEG files.
- PDFs with combined image and text. Text in PDFs can be extracted during indexing without the use of enrichment steps, but the addition of image and natural language processing can often produce a better outcome than standard indexing provides.
- Multi-lingual content against which you want to apply language detection and possibly text translation.
- Unstructured or semi-structured documents containing content that has inherent meaning or context that is hidden in the larger document.

Custom skills can support more complex scenarios, such as recognizing forms, or custom entity detection using a model that you provide and wrap in the custom skill web interface. Several examples of custom skills include Forms Recognizer.

<https://docs.microsoft.com/en-us/azure/search/cognitive-search-concept-intro>

165) Consider the following schema of an Azure Search index:

```
{  
    "name": "musicstoreindex",  
    "fields": [  
        { "name": "key", "type": "Edm.String", "key": true },  
        { "name": "albumtitle", "type": "Edm.String" },  
        { "name": "albumurl", "type": "Edm.String", "filterable": false },  
        { "name": "genre", "type": "Edm.String" },  
        { "name": "genreDescription", "type": "Edm.String", "filterable": false },  
        { "name": "artistname", "type": "Edm.String" },  
        { "name": "orderableonline", "type": "Edm.Boolean" },  
        { "name": "rating", "type": "Edm.Int32" },  
        { "name": "tags", "type": "Collection(Edm.String)" },  
        { "name": "price", "type": "Edm.Double", "filterable": false },  
        { "name": "margin", "type": "Edm.Int32", "retrievable": false },  
        { "name": "inventory", "type": "Edm.Int32" },  
        { "name": "lastupdated", "type": "Edm.DateTimeOffset" }  
    ],  
    "scoringProfiles": [  
        {  
            "name": "boostGenre",  
            "text": {  
                "weights": {  
                    "albumTitle": 1.5,  
                    "genre": 5,  
                    "artistname": 2  
                }  
            }  
        },  
        {  
            "name": "newAndHighlyRated",  
            "functions": [  
                {  
                    "type": "freshness",  
                    "fieldName": "lastUpdated",  
                    "boost": 10,  
                    "interpolation": "quadratic",  
                    "freshness": {  
                        "boostingDuration": "P365D"  
                    }  
                },  
                {  
                    "type": "magnitude",  
                    "fieldName": "rating",  
                    "boost": 10,  
                    "interpolation": "linear",  
                    "magnitude": {  
                        "boostingRangeStart": 1,  
                        "boostingRangeEnd": 5,  
                        "constantBoostBeyondRange": false  
                    }  
                }  
            ]  
        }  
    ],  
    "suggesters": [  
        {  
            "name": "sg",  
            "searchMode": "analyzingInfixMatching",  
            "sourceFields": [ "albumtitle", "artistname" ]  
        }  
    ]  
}
```

166) You have the following Python method.

```
def create_resource(resource_name, kind, account_tier, location) :  
    parameters = CognitiveServicesAccount(sku=Sku(name=account_tier), kind=kind, location=location, properties={})  
    result = cogSvcClient.accounts.create(resource_group_name, resource_name, parameters)
```

You need to deploy an Azure resource to the East US Azure region. The resource will be used to perform sentiment analysis.

How should you call the method?

- A.create_resource("res1", "TextAnalytics", "Standard", "East US")
- B.create_resource("res1", "ContentModerator", "S0", "eastus")
- C.create_resource("res1", "ContentModerator", "Standard", "East US")
- D.create_resource("res1", "TextAnalytics", "S0", "eastus")

Answer(s): D

168) You have a collection of Microsoft Word documents and PowerPoint presentations in German. You need to create a solution to translate the files to French. The solution must meet the following requirements:

- Preserve the original formatting of the files.
- Support the use of a custom glossary.

You create a blob container for German files and a blob container for French files. You upload the original files to the container for German files.

Which three actions should you perform in sequence to complete the solution? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Answer Area

Perform an asynchronous translation by using the list of files to be translated.



Perform an asynchronous translation by using the document translation specification.



Generate a list of files to be translated.



Upload a glossary file to the container for German files.



Upload a glossary file to the container for French files.

Define a document translation specification that has a French target.

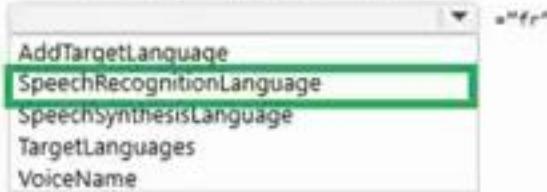
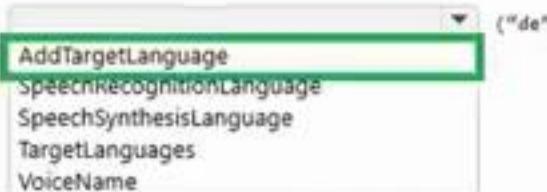
169) You are building an app by using the Speech SDK. The app will translate speech from French to German by using natural language processing.

You need to define the source language and the output language.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
var speechTranslationConfig =  
    SpeechTranslationConfig.FromSubscription(speechKey, speechRegion);  
  
speechTranslationConfig.  
      
        AddTargetLanguage  
        SpeechRecognitionLanguage  
        SpeechSynthesisLanguage  
        TargetLanguages  
        VoiceName  
  
speech_translation_config.  
      
        AddTargetLanguage  
        SpeechRecognitionLanguage  
        SpeechSynthesisLanguage  
        TargetLanguages  
        VoiceName
```

171) You build a language model by using a Conversational Language Understanding. The language model is used to search for information on a contact list by using an intent named FindContact.

A conversational expert provides you with the following list of phrases to use for training.

- Find contacts in London.
- Who do I know in Seattle?
- Search for contacts in Ukraine.

You need to implement the phrase list in Conversational Language Understanding.

Solution: You create a new utterance for each phrase in the FindContact intent.

Does this meet the goal?

- A.Yes
- B.No

Answer(s): B

172) You have a question answering project in Azure Cognitive Service for Language. You need to move the project to a Language service instance in a different Azure region.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
From the new Language service instance, train and publish the project.	>
From the new Language service instance, import the project file.	<
From the new Language service instance, enable custom text classification.	<
From the original Language service instance, export the existing project.	<
From the new Language service instance, regenerate the keys.	<
From the original Language service instance, train and publish the model.	<

Answer Area
From the original Language service instance, export the existing project.
From the new Language service instance, import the project file.
From the new Language service instance, train and publish the project.

173) You are building a customer support chatbot.

You need to configure the bot to identify the following:

- Code names for internal product development
- Messages that include credit card numbers

The solution must minimize development effort.

Which Azure Cognitive Service for Language feature should you use for each requirement? To answer, drag the appropriate features to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Features

Custom named entity recognition (NER)

Key phrase extraction

Language detection

Named Entity Recognition (NER)

Personally Identifiable Information (PII) detection

Sentiment analysis

Answer Area

Identify code names for internal product development:

Identify messages that include credit card numbers:

⋮
⋮
⋮
⋮

176) You are developing a text processing solution.
You have the function shown below.

```
static void GetKeyWords(TextAnalyticsClient textAnalyticsClient, string text)
{
    var response = textAnalyticsClient.RecognizeEntities(text);
    Console.WriteLine("Key words:");

    foreach (CategorizedEntity entity in response.Value)
    {
        Console.WriteLine($"\\t{entity.Text}");
    }
}
```

For the second argument, you call the function and specify the following string.
Our tour of Paris included a visit to the Eiffel Tower

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

177) You are building an Azure web app named App1 that will translate text from English to Spanish.

You need to use the Text Translation REST API to perform the translation. The solution must ensure that you have data sovereignty in the United States.

How should you complete the URI? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

https:// / ?api-version=3.0&to=es

detect
languages
text-to-speech
translate

api.cognitive.microsofttranslator.com
api-nam.cognitive.microsofttranslator.com
api-nam.cognitiveservices.azure.com
eastus.api.cognitive.microsoft.com

180) You have a Language Understanding solution that runs in a Docker container.

You download the Language Understanding container image from the Microsoft Container Registry (MCR).

You need to deploy the container image to a host computer.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

From the host computer, build the container and specify the output directory.



From the Language Understanding portal, retrain the model.

Answer Area

From the Language Understanding portal, export the solution as a package file.

From the host computer, move the package file to the Docker input directory.

From the host computer, run the container and specify the input directory.



184) You develop a Python app named App1 that performs speech-to-speech translation.

You need to configure App1 to translate English to German.

How should you complete the SpeechTranslationConfig object? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values

add_target_language

speech_synthesis_language

speech_recognition_language

voice_name

Answer Area

```
def translate_speech_to_text():

    translation_config = speechsdk.translation.SpeechTranslationConfig(subscription=speech_key, region=service_region)

    translation_config. [ ] Value = "en-US";
    translation_config. [ ] Value ("de");
```

187) You are building a solution that students will use to find references for essays.
You use the following code to start building the solution.
For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

```
using Azure;
using System;
using Azure.AI.TextAnalytics;

private static readonly AzureKeyCredential credentials = new AzureKeyCredential("<key>");
private static readonly Uri endpoint = new Uri("<endpoint>");

static void EntityLinker(TextAnalyticsClient client)
{
    var response = client.RecognizeLinkedEntities(
        "Our tour guide took us up the Space Needle during our trip to Seattle last week.");
}
```

189) You develop an app in C# named App1 that performs speech-to-speech translation.

You need to configure App1 to translate English to German.

How should you complete the SpeechTranslationConfig object? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values

addTargetLanguage

speechSynthesisLanguage

speechRecognitionLanguage

voiceName

Answer Area

```
var translationConfig = SpeechTranslationConfig.FromSubscription(SPEECH_SUBSCRIPTION_KEY, SPEECH_SERVICE_REGION);
    translationConfig. speechRecognitionLanguage = "en-US";
    translationConfig. speechSynthesisLanguage ("de");
```

Correct Answer: ABF

Scenario: Support autocompletion and autosuggestion based on all product name variants.

A: Call a suggester-enabled query, in the form of a Suggestion request or Autocomplete request, using an API. API usage is illustrated in the following call to the Autocomplete REST API.

POST /indexes/myxboxgames/docs/autocomplete?search&api-version=2020-06-30

```
{  
  "search": "minecraf", "suggesterName": "sg"  
}
```

B: In Azure Cognitive Search, typeahead or "search-as-you-type" is enabled through a suggester. A suggester provides a list of fields that undergo additional tokenization, generating prefix sequences to support matches on partial terms. For example, a suggester that includes a City field with a value for "Seattle" will have prefix combinations of "sea", "seat", "seatt", and "seattl" to support typeahead.

F: Use the default standard Lucene analyzer ("analyzer": null) or a language analyzer (for example, "analyzer": "en.Microsoft") on the field.

Reference:

<https://docs.microsoft.com/en-us/azure/search/index-add-suggesters>

194) You are building an Azure WebJob that will create knowledge bases from an array of URLs. You instantiate a QnAMakerClient object that has the relevant API keys and assign the object to a variable named client. You need to develop a method to create the knowledge bases. Which two actions should you include in the method? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. Create a list of FileDTO objects that represents data from the WebJob.
- B. Call the client
- C. Knowledgebase
- D. CreateAsync method.
- E. Create a list of QnADTO objects that represents data from the WebJob.
- F. Create a CreateKbDTO object.

Correct Answer: AC

Reference:

<https://docs.microsoft.com/en-us/rest/api/cognitiveservices-qnamaker/qnamaker4.0/knowledgebase/create>

195) You need to implement a table projection to generate a physical expression of an Azure Cognitive Search index.

Which three properties should you specify in the skillset definition JSON configuration table node?

Each correct answer presents part of the solution. (Choose three.)

NOTE: Each correct selection is worth one point.

- A. tableName
- B. generatedKeyName
- C. dataSource
- D. dataSourceConnection
- E. source

Correct Answer: ABE

Defining a table projection.

Each table requires three properties:

tableName: The name of the table in Azure Storage.

generatedKeyName: The column name for the key that uniquely identifies this row.

source: The node from the enrichment tree you are sourcing your enrichments from. This node is usually the output of a shaper, but could be the output of any of the skills.

Reference:

<https://docs.microsoft.com/en-us/azure/search/knowledge-store-projection-overview>

197) You have a web app that uses Azure Cognitive Search.

When reviewing billing for the app, you discover much higher than expected charges. You suspect that the query key is compromised.

You need to prevent unauthorized access to the search endpoint and ensure that users only have read only access to the documents collection. The solution must minimize app downtime.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Add a new query key.	
Regenerate the secondary admin key.	
Change the app to use the secondary admin key.	
Change the app to use the new key.	
Regenerate the primary admin key.	
Delete the compromised key.	

199) You have an existing Azure Cognitive Search service.

You have an Azure Blob storage account that contains millions of scanned documents stored as images and PDFs.

You need to make the scanned documents available to search as quickly as possible. What should you do?

- A. Split the data into multiple blob container
- B.Create a Cognitive Search service for each containe
- C.Within each indexer definition, schedule the same runtime execution pattern.
- D.Split the data into multiple blob container
- E.Create an indexer for each containe
- F.Increase the search unit
- G.Within each indexer definition, schedule a sequential execution pattern.
- H.Create a Cognitive Search service for each type of document.
- I.Split the data into multiple virtual folder
- J.Create an indexer for each folde
- K.Increase the search units.Within each indexer definition, schedule the same runtime execution pattern.

Correct Answer: D

Reference:

<https://docs.microsoft.com/en-us/azure/search/search-howto-indexing-azure-blob-storage>

200) You are designing a conversation flow to be used in a chatbot. You need to test the conversation flow by using the Microsoft Bot Framework Emulator. How should you complete the .chat file? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

user=User1
bot=watchbot
user: I want a new watch.
bot: [] [Delay=3000]

Attachment
ConversationUpdate
Typing

bot: I can help you with that! Let me see what I can find.
bot: Here's what I found.
bot:

[AttachmentLayout=]

adaptivecard
carousel
thumbnail

[Attachment=https://contoso.blob.core.windows.net/watch01.jpg]
[Attachment=https://contoso.blob.core.windows.net/watch02.jpg]

user: I like the first one.
bot: Sure, pulling up more information.

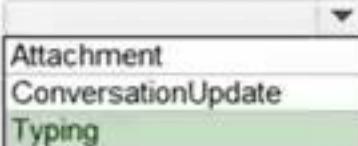
bot: [Attachment=cards\watchProfileCard.json]
user: That's nice! Thank you.
bot: Sure, you are most welcome!

[]
adaptivecard
carousel
list

200) You are designing a conversation flow to be used in a chatbot. You need to test the conversation flow by using the Microsoft Bot Framework Emulator. How should you complete the .chat file? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area

```
user=User1  
bot=watchbot  
user: I want a new watch.
```

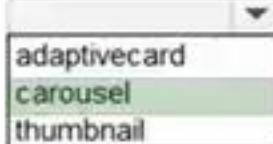
```
bot: [  ][Delay=3000]
```

Attachment
ConversationUpdate
Typing

```
bot: I can help you with that! Let me see what I can find.
```

```
bot: Here's what I found.
```

```
bot:
```

```
[AttachmentLayout=  ]
```

adaptivecard
carousel
thumbnail

```
[Attachment=https://contoso.blob.core.windows.net/watch01.jpg]
```

```
[Attachment=https://contoso.blob.core.windows.net/watch02.jpg]
```

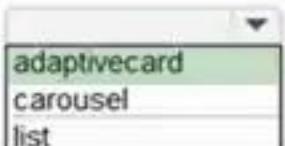
```
user: I like the first one.
```

```
bot: Sure, pulling up more information.
```

```
bot: [Attachment=cards\watchProfileCard.json
```

```
user: That's nice! Thank you.
```

```
bot: Sure, you are most welcome!
```

```
]
```

adaptivecard
carousel
list

202) You are reviewing the design of a chatbot. The chatbot includes a language generation file that contains the following fragment.

```
# Greet(user)
- ${Greeting()}, ${user.name}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
<code> \${user.name} </code> retrieves the user name by using a prompt.	<input type="radio"/>	<input checked="" type="radio"/>
<code> Greet () </code> is the name of the language generation template.	<input type="radio"/>	<input checked="" type="radio"/>
<code> \${Greeting () } </code> is a reference to a template in the language generation file.	<input checked="" type="radio"/>	<input type="radio"/>

Reference:

<https://docs.microsoft.com/en-us/composer/how-to-ask-for-user-input>

203) You are building a multilingual chatbot.

You need to send a different answer for positive and negative messages.

Which two Text Analytics APIs should you use? Each correct answer presents part of the solution. (Choose two.)

NOTE: Each correct selection is worth one point.

- A. Linked entities from a well-known knowledge base
- B. Sentiment Analysis
- C. Key Phrases
- D. Detect Language
- E. Named Entity Recognition

Correct Answer: BD

B: The Text Analytics API's Sentiment Analysis feature provides two ways for detecting positive and negative sentiment. If you send a Sentiment Analysis request, the API will return sentiment labels (such as "negative", "neutral" and "positive") and confidence scores at the sentence and document-level.

D: The Language Detection feature of the Azure Text Analytics REST API evaluates text input for each document and returns language identifiers with a score that indicates the strength of the analysis.

This capability is useful for content stores that collect arbitrary text, where language is unknown. Reference:
<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-tos/text-analytics-how-to-sentiment-analysis?tabs=version-3-1>

<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-tos/text-analytics-how-to-language-detection>

204) You are planning the product creation project.
You need to recommend a process for analyzing videos.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order. (Choose four.)

Suggested Answer: Actions	Answer Area
	Upload the video to blob storage.
	Index the video by using the Azure Video Analyzer for Media (previously Video Indexer) API.
Analyze the video by using the Computer Vision API.	Extract the transcript from the Azure Video Analyzer for Media (previously Video Indexer) API.
Extract the transcript from Microsoft Stream.	Translate the transcript by using the Translator API.
Send the transcript to the Language Understanding API as an utterance.	
Upload the video to file storage.	

205) You need to develop code to upload images for the product creation project. The solution must meet the accessibility requirements.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

```
public static async Task<string> SuggestAltText(ComputerVisionClient client,
{
    List<VisualFeatureTypes?> features = new List<VisualFeatureTypes?>()
    {
        VisualFeatureTypes.Description
        VisualFeatureTypes.ImageType
        VisualFeatureTypes.Objects
        VisualFeatureTypes.Tags
    };
    ImageAnalysis results = await client.AnalyzeImageAsync(image, features);

    var c = results.Brands.DetectedBrands[0]
    var c = results.Description.Captions[0]
    var c = results.Metadata[0]
    var c = results.Objects[0]

    if(c.Confidence>0.5) return(c.Text);
}
```

Dictionary
stream
string