

Question 1.1 and 1.2 Modifying Code (All 4 languages)

```

1 import boto3
2 client = boto3.client('comprehend')
3
4 # Detect Entities
5 response = client.detect_dominant_language(
6     Text="The French Revolution was a period of social and political upheaval in France and its colonies beginn
7 )
8
9 print(response['Languages'])

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ source /home/lachlan/Cloud/cits5503/venv/bin/activate
/home/lachlan/Cloud/cits5503/venv/bin/python "/home/venv" lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503
/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
[{"LanguageCode": "en", "Score": 0.9961233139038086}
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ 

```

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.detect_dominant_language(
7     Text="The French Revolution was a period of social and political upheaval in F
8 )
9
10 item = response['Languages']
11 language = item[0]['LanguageCode']
12 language = Lang(language).name
13 score = int(item[0]['Score']*100)
14 score = str(score)
15 print("dominant language " + language + " was detected with " + score + '%' + con

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 0% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 1% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 1% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ 

```

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.detect_dominant_language()
7     Text="amor che move il sole e l'altra stelle."
8 )
9
10 item = response['Languages']
11 language = item[0]['LanguageCode']
12 print(language)
13 language = Lang(language).name
14 score = int(item[0]['Score']*100)
15 score = str(score)
16 print("dominant language " + language + " was detected with " + score + '%' + ' confidence')

"EndOffset": 421}]}
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lach
lan/Cloud/cits5503/Labs/Lab 9/entities.py"
[{"Index": 0, "Entities": [{"Score": 0.9943656130233765, "Type": "EVENT", "Text": "French Revolution", "BeginOffset": 4, "EndOffset": 21}, {"Score": 0.9941441416740417, "Type": "LOCATION", "Text": "France", "BeginOffset": 71, "EndOffset": 77}, {"Score": 0.9984388947486877, "Type": "DATE", "Text": "1789", "BeginOffset": 108, "EndOffset": 112}, {"Score": 0.9990737438201964, "Type": "DATE", "Text": "1799", "BeginOffset": 127, "EndOffset": 131}]}
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lach
lan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
it
dominant language Italian was detected with 99% confidence

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.detect_dominant_language()
7     Text="Moi je n'étais rien Et voilà qu'aujourd'hui je suis le gardien du sommei
8 )
9
10 item = response['Languages']
11 language = item[0]['LanguageCode']
12 language = Lang(language).name
13 score = int(item[0]['Score']*100)
14 score = str(score)
15 print("dominant language " + language + " was detected with " + score + '%' + con

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 1% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language Spanish was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language French was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ 

```

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.detect_dominant_language()
7     Text="El Quijote es la obra más conocida de Miguel de Cervantes Saavedra. Publ
8 )
9
10 item = response['Languages']
11 language = item[0]['LanguageCode']
12 language = Lang(language).name
13 score = int(item[0]['Score']*100)
14 score = str(score)
15 print("dominant language " + language + " was detected with " + score + '%' + ' confidence')

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 1% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language English was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python
"/home/lachlan/Cloud/cits5503/Labs/Lab 9/comprehend.py"
dominant language Spanish was detected with 99% confidence
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ 

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Step 2 (All 4 Languages)

```
Lab9MoreAI.md  comprehend.py  sentiment.py  entities.py  keyphrases.py  syntax.py  D  I

Labs > Lab 9 > sentiment.py > ...
1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_sentiment([
7     {
8         'TextList': ["L'amor che move il sole e l'altre stelle."],
9         'LanguageCode': 'it'
10    }
11])
12 itemsList = []
13 item = response['ResultList']
14 sentimentScore = item[0]['SentimentScore']
15 print(sentimentScore)
16 itemsList.append(("positive", sentimentScore['Positive']))
17 itemsList.append(("negative", sentimentScore['Negative']))
18 itemsList.append(("neutral", sentimentScore['Neutral']))
19 itemsList.append(("mixed", sentimentScore['Mixed']))

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER D Python + × ⓘ

set': 71, 'EndOffset': 77}, {'Score': 0.9984388947486877, 'Type': 'DATE', 'Text': '1789', 'BeginOffset': 108
}, {'EndOffset': 112}, {'Score': 0.9990737438201904, 'Type': 'DATE', 'Text': '1799', 'BeginOffset': 127, 'EndOffset': 131}], 'language': 'it'}
• [INFO] lauchlanchachian-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/9/comprehend.py"
it
dominant language English was detected with 99% confidence
[INFO] lauchlanchachian-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/9/comprehend.py"
{'Positive': 0.98532190990448, 'Negative': 0.004254049155861139, 'Neutral': 0.00095397968894522, 'Mixed': 0.001359764719339284}
the sentiment of the text is positive with sentiment score 98
• [INFO] lauchlanchachian-VirtualBox:~/Cloud/cits5503$
```



```
Labs> Lab 9.9 > sentiment.py ...  
1 import boto3  
2 from iso639 import lang  
3 client = boto3.client('comprehend')  
4  
5 # Detect Entities  
6 response = client.batch_detect_sentiment(  
7     TextList=[{"Text": "The French Revolution was a period of social and political upheaval in France and its colonies beginning in 1789 and  
8 LanguageCode": "en"}  
9 )  
10  
11 itemsList = []  
12 item = response['ResultList'][0]  
13 sentimentScore = item[0]['SentimentScore']  
14 print(sentimentScore)  
15 itemsList.append(["positive", sentimentScore['Positive']])  
16 itemsList.append(["negative", sentimentScore['Negative']])  
17 itemsList.append(["neutral", sentimentScore['Neutral']])  
18 itemsList.append(["mixed", sentimentScore['Mixed']])  
19 itemsList = sorted(itemsList, key=lambda l:l[1], reverse=True)  
20  
21  
22 print("the sentiment of the text is " + str(itemsList[0][0]) + " with sentiment score " + str(int(itemsList[0][1] * 100)))
```

```
Labs/Lab9/ipython_M   Release Notes: 1.7.2  Lab9MoreAI.mdb  Comprehend.py U  sentiment.py X

Labs> Lab 9 > sentiment.py > ...

1 #!/usr/bin/python
2 from boto3 import Session
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_sentiment(
7     TextList =[{"Text": "Moi je n'étais rien Et voilà qu'aujourd'hui Je suis le gardien Du sommeil de ses nuits Je l'aime à mourir Vous po
8     LanguageCode:'fr'
9 )
10
11 itemsList = []
12 item = response['ResultList']
13 sentimentScore = item[0]['SentimentScore']
14 print(sentimentScore)
15 itemsList.append(["positive", sentimentScore['Positive']])
16 itemsList.append(["negative", sentimentScore['Negative']])
17 itemsList.append(["neutral", sentimentScore['Neutral']])
18 itemsList.append(["mixed", sentimentScore['Mixed']])
19 itemsList = sorted(itemsList, key=lambda l:l[1], reverse=True)
20
21
22 print("the sentiment of the text is " + str(itemsList[0][0]) + " with sentiment score " + str(int(itemsList[0][1] * 100)))
```

Step 3 Entities (All 4 Languages) People, places, objects, dates. eg. French Revolution as event.

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["Moi je n'étais rien Et voilà qu'aujourd'hui Je suis le gardien Du sommeil d",
8     LanguageCode='fr'
9 )
10 print(response['ResultList'])
11

```

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["L'amor che move il sole e l'altra stelle."],
8     LanguageCode='it'
9 )
10 print(response['ResultList'])
11

```

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["The French Revolution was a period of social and political upheaval in Fran",
8     LanguageCode='en'
9 )
10 print(response['ResultList'])
11

```

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["El Quijote es la obra más conocida de Miguel de Cervantes Saavedra. Publica",
8     LanguageCode='es'
9 )
10 print(response['ResultList'])
11

```

the sentiment of the text is negative with sentiment score 59

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503\$ /home/lachlan/cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"

```

[{"Index": 0, "Entities": [{"Score": 0.987237572669829, "Type": "DATE", "Text": "aujourd'hui", "BeginOffset": 32, "EndOffset": 43}, {"Score": 0.6959105134010315, "Type": "QUANTITY", "Text": "Tout ce qu'il", "BeginOffset": 127, "EndOffset": 140}, {"Score": 0.604881078071594, "Type": "QUANTITY", "Text": "tout", "BeginOffset": 200, "EndOffset": 204}, {"Score": 0.5311335325241089, "Type": "QUANTITY", "Text": "tout", "BeginOffset": 223, "EndOffset": 227}]}

```

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["El Quijote es la obra más conocida de Miguel de Cervantes Saavedra. Publica",
8     LanguageCode='es'
9 )
10 print(response['ResultList'])
11

```

Labs > Lab 9 > entities.py > ...

```

1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_entities(
7     TextList =["El Quijote es la obra más conocida de Miguel de Cervantes Saavedra. Publica",
8     LanguageCode='es'
9 )
10 print(response['ResultList'])
11

```

għit-tnejha

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503\$ /home/lachlan/cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"

```

[{"Index": 0, "Entities": [{"Score": 0.9835476279258728, "Type": "TITLE", "Text": "El ingenioso hidalgo don Quijote de la Mancha", "BeginOffset": 81, "EndOffset": 94}, {"Score": 0.8697961568832397, "Type": "DATE", "Text": "1605", "BeginOffset": 112, "EndOffset": 157}, {"Score": 0.6641538143157959, "Type": "QUANTITY", "Text": "una de las más traducidas", "BeginOffset": 173, "EndOffset": 177}, {"Score": 0.9596462845802307, "Type": "OTHER", "Text": "española", "BeginOffset": 182, "EndOffset": 185}, {"Score": 0.9596462845802307, "Type": "QUANTITY", "Text": "una de las más traducidas", "BeginOffset": 231, "EndOffset": 239}, {"Score": 0.719598114490509, "Type": "DATE", "Text": "1615", "BeginOffset": 269, "EndOffset": 294}, {"Score": 0.9852679967880249, "Type": "QUANTITY", "Text": "segunda parte", "BeginOffset": 318, "EndOffset": 331}, {"Score": 0.94227135181427, "Type": "TITLE", "Text": "Quijote de Cervantes", "BeginOffset": 336, "EndOffset": 356}, {"Score": 0.989924638938904, "Type": "TITLE", "Text": "El ingenioso caballero don Quijote de la Mancha", "BeginOffset": 374, "EndOffset": 421}]}

```

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503\$ /home/lachlan/cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"

```

[{"Index": 0, "Entities": [{"Score": 0.9944565130233765, "Type": "EVENT", "Text": "French Revolution", "BeginOffset": 4, "EndOffset": 21}, {"Score": 0.994141416740417, "Type": "LOCATION", "Text": "France", "BeginOffset": 71, "EndOffset": 77}, {"Score": 0.9984388947486877, "Type": "DATE", "Text": "1789", "BeginOffset": 108, "EndOffset": 112}, {"Score": 0.9990737438201904, "Type": "DATE", "Text": "1799", "BeginOffset": 127, "EndOffset": 131}]}

```

(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503\$ /home/lachlan/cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"

```

[{"Index": 0, "Entities": []}]

```

Step 4 Key-phrases: A phrase containing a noun, such as “a period” identifies period of time as noun.

```

Labs > Lab 9 > keyphrases.py ...
1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_key_phrases()
7     TextList =[ "L'amor che move il sole e l'altre stelle.", ],
8     LanguageCode='it'
9
10 print(response['ResultList'])

```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

{'Positive': 0.9853219090448, 'Negative': 0.004254049155861139, 'Neutral': 0.00905397906894522, 'Mixed': 0.0013597647193819284}
the sentiment of the text is positive with sentiment score 98
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"
[{'Index': 0, 'Entities': []}]
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/keyphrases.py"
[{'Index': 0, 'KeyPhrases': [{'Score': 0.9999063611030579, 'Text': 'L'amor', 'BeginOffset': 0, 'EndOffset': 6}, {'Score': 0.9997649788856506, 'Text': 'che', 'BeginOffset': 7, 'EndOffset': 10}, {'Score': 0.999977171421051, 'Text': 'il sole', 'BeginOffset': 16, 'EndOffset': 23}, {'Score': 0.9999290108680725, 'Text': 'l'altre stelle', 'BeginOffset': 26, 'EndOffset': 40}]}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ []

```

```

Labs > Lab 9 > keyphrases.py ...
1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_key_phrases()
7     TextList =[ "Moi je n'étais rien Et voilà qu'aujourd'hui Je suis le gardien Du sommeil de ses nuits", ],
8     LanguageCode='fr'
9
10 print(response['ResultList'])

```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

[{'Index': 0, 'KeyPhrases': [{"Score": 0.9999063011030579, "Text": "Moi", "BeginOffset": 0, "EndOffset": 6}, {"Score": 0.9997649788856506, "Text": "je", "BeginOffset": 7, "EndOffset": 10}, {"Score": 0.999977171421051, "Text": "n'étais rien", "BeginOffset": 16, "EndOffset": 23}, {"Score": 0.9999290108680725, "Text": "Et voilà qu'aujourd'hui Je suis le gardien Du sommeil de ses nuits", "BeginOffset": 40}]}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/keyphrases.py"
[{'Index': 0, 'KeyPhrases': [{"Score": 0.9999063011030579, "Text": "Moi", "BeginOffset": 0, "EndOffset": 6}, {"Score": 0.9997649788856506, "Text": "je", "BeginOffset": 7, "EndOffset": 10}, {"Score": 0.999977171421051, "Text": "n'étais rien", "BeginOffset": 16, "EndOffset": 23}, {"Score": 0.9999290108680725, "Text": "Et voilà qu'aujourd'hui Je suis le gardien Du sommeil de ses nuits", "BeginOffset": 40}]}

```

```

Labs > Lab 9 > keyphrases.py ...
1 import boto3
2 from iso639 import Lang
3 client = boto3.client('comprehend')
4
5 # Detect Entities
6 response = client.batch_detect_key_phrases()
7     TextList =[ "The French Revolution was a period of social and political upheaval in France", ],
8     LanguageCode='en'
9
10 print(response['ResultList'])

```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```

[{'Index': 0, 'KeyPhrases': [{"Score": 0.9999063011030579, "Text": "The French Revolution", "BeginOffset": 0, "EndOffset": 10}, {"Score": 0.9997649788856506, "Text": "was", "BeginOffset": 11, "EndOffset": 14}, {"Score": 0.999977171421051, "Text": "a period", "BeginOffset": 15, "EndOffset": 20}, {"Score": 0.9999290108680725, "Text": "of social and political upheaval", "BeginOffset": 21, "EndOffset": 40}]}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/keyphrases.py"
[{'Index': 0, 'KeyPhrases': [{"Score": 0.9999063011030579, "Text": "The French Revolution", "BeginOffset": 0, "EndOffset": 10}, {"Score": 0.9997649788856506, "Text": "was", "BeginOffset": 11, "EndOffset": 14}, {"Score": 0.999977171421051, "Text": "a period", "BeginOffset": 15, "EndOffset": 20}, {"Score": 0.9999290108680725, "Text": "of social and political upheaval", "BeginOffset": 21, "EndOffset": 40}]}

```

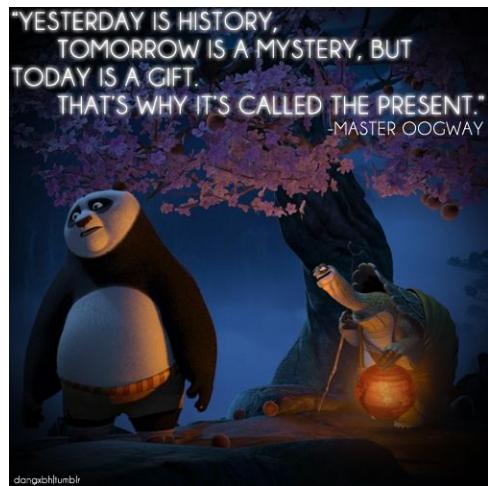
Step 5 Syntax identifies nouns, verbs, and adjectives in the text.

```
labs> Lab 9 > syntax.py > ...
1 from iso639 import Lang
2 client = boto3.client('comprehend')
3
4 # Detect Entities
5 response = client.batch_detect_syntax([
6     {
7         'TextList': ["Moi je n'étais rien Et voilà qu'aujourd'hui Je suis le gardien Du sommeil d",
8             "LanguageCode": 'fr'
9     }
10])
print(response['ResultList'])

PROBLEMS ① OUTPUT DEBUG CONSOLE TERMINAL JUPYTER Python + □ ▲ ▲

[venv] lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/syntax.py"
[{"Index": 0, "SyntaxTokens": [{"TokenId": 1, "Text": "Moi", "BeginOffset": 0, "EndOffset": 3, "PartOfSpeech": {"Tag": "PRON", "Score": 0.9892309308052063}, {"TokenId": 2, "Text": "je", "BeginOffset": 4, "EndOffset": 6, "PartOfSpeech": {"Tag": "PRON", "Score": 0.9999996423721313}, {"TokenId": 3, "Text": "n'", "BeginOffset": 7, "EndOffset": 9, "PartOfSpeech": {"Tag": "ADV", "Score": 0.9426575499534607}, {"TokenId": 5, "Text": "étais", "BeginOffset": 10, "EndOffset": 14, "PartOfSpeech": {"Tag": "AUX", "Score": 0.9539594650268555}, {"TokenId": 6, "Text": "rien", "BeginOffset": 15, "EndOffset": 19, "PartOfSpeech": {"Tag": "PRON", "Score": 0.9524639248847961}, {"TokenId": 6, "Text": "Et", "BeginOffset": 20, "EndOffset": 22, "PartOfSpeech": {"Tag": "CONJ", "Score": 0.999829998951782}, {"TokenId": 7, "Text": 'voilà', "BeginOffset": 23, "EndOffset": 28, "PartOfSpeech": {"Tag": "VERB", "Score": 0.998165965808261}, {"TokenId": 8, "Text": "qu'", "BeginOffset": 29, "EndOffset": 32, "PartOfSpeech": {"Tag": "ADV", "Score": 0.999937176704468}, {"TokenId": 10, "Text": "aujourd'hui", "BeginOffset": 32, "EndOffset": 43, "PartOfSpeech": {"Tag": "PRON", "Score": 0.9998699426651001}, {"TokenId": 11, "Text": "suis", "BeginOffset": 44, "EndOffset": 47, "PartOfSpeech": {"Tag": "AUX", "Score": 0.89295828423284607}, {"TokenId": 12, "Text": "le", "BeginOffset": 52, "EndOffset": 54, "PartOfSpeech": {"Tag": "DET", "Score": 0.999955808978394}, {"TokenId": 13, "Text": "gardien", "BeginOffset": 55, "EndOffset": 62, "PartOfSpeech": {"Tag": "NOUN", "Score": 0.9991827607154846}, {"TokenId": 14, "Text": "Du", "BeginOffset": 63, "EndOffset": 65, "PartOfSpeech": {"Tag": "ADP", "Score": 0.7431869107989}, {"TokenId": 15, "Text": "sommeil", "BeginOffset": 66, "EndOffset": 73, "PartOfSpeech": {"Tag": "NOUN", "Score": 0.9985896944999695}, {"TokenId": 16, "Text": "de", "BeginOffset": 74, "EndOffset": 76, "PartOfSpeech": {"Tag": "ADP", "Score": 0.99981808178983}, {"TokenId": 17, "Text": "nuits", "BeginOffset": 77, "EndOffset": 80, "PartOfSpeech": {"Tag": "DET", "Score": 0.999657154083252}, {"TokenId": 18, "Text": "nuits", "BeginOffset": 81, "EndOffset": 84, "PartOfSpeech": {"Tag": "NOUN", "Score": 0.99981808178983}]}]
```

4 Photos



quote.jpeg



urban.jpeg



Beach.jpeg



Family.jpeg

CREATING BUCKET USING TERMINAL

```
lachlan@lachlan-VirtualBox:~/Cloud$ python3 cloudstorage.py -i
```

⌚ Upload succeeded
View details below.

Files and folders (4 Total, 293.7 KB)

Find by name

< 1 >

Name	Folder	Type	Size	Status	Error
beach.jpeg	Lab 9/	image/jpeg	133.3 KB	⌚ Succeeded	-
family.jpeg	Lab 9/	image/jpeg	48.8 KB	⌚ Succeeded	-
quote.jpeg	Lab 9/	image/jpeg	41.6 KB	⌚ Succeeded	-
urban.jpeg	Lab 9/	image/jpeg	70.0 KB	⌚ Succeeded	-

Detecting Labels

```
Labs > Lab 9 > rekognition.py ...
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "urban.jpg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response['Labels'][0])
```

```
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "quote.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response['Labels'][0])

98821625, {'Width': 0.1685830652137756, 'Height': 0.5372450351715088, 'Left': 0.3646520972
251892, 'Top': 0.1456752019882201}, {'Confidence': 99.36371612548828}, {'BoundingBox': {'Width': 0.209421798
055555, 'Height': 0.9338598905555555, 'Left': 0.146268359864644, 'Top': 0.0818129898896761}, 'Confide
nce': 99.31426239913672}, {'BoundingBox': {'Width': 0.14649598773392, 'Height': 0.315393298864364
6, 'Left': 0.4586069881445093, 'Top': 0.675395985915771}, 'Confidence': 98.453912183757}, {'BoundingBox': {'Width': 0.0904266860098388, 'Height': 0.4267802238464355, 'Left': 0.5076999664306641, 'Top': 0.2648122686616516}, 'Confidence': 96.9017562866211}, {'BoundingBox': {'Width': 0.40679527002967693, 'Height': 0.9573730230331421, 'Left': 0.0050934599712491035, 'Top': 0.015705158933997154}, 'Confidence': 87.94532012939453}, 'Parents': []
[]}
[{"version": "lachlan@lachlan-VirtualBox ~$ cd cloud/cits5503/home/lachlan/cloud/cits5503/venv/bin/python ~/home/lachlan/cloud/cits5503/lambda/rekognition.py"}]
```

```
PROBLEMS ① OUTPUT DEBUG CONSOLE TERMINAL JUPYTER Python + □ □

'Instances': [], 'Parents': [{'Name': 'Urban'}, {'Name': 'Building'}]}, 'LabelModelVersion': '2.0', 'ResponseMetaHeaders': {'RequestID': '476c041-8de1-488a-a524-61bc20fcc7e3', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '476c041-8de1-488a-a524-61bc20fcc7e3', 'content-type': 'application/x-amz-json-1.1', 'content-length': '1373', 'date': 'Sat, 15 Oct 2022 08:54:55 GMT', 'RetryAttempts': 0}}, 'RetryAttempts': 0}
❸ (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
Traceback (most recent call last):
  File "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py", line 14, in <module>
    _print(response['labels'][0])
KeyError: 'labels'
❹ (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
{'Name': 'High Rise', 'Confidence': 99.87858581542969, 'Instances': [], 'Parents': [{"Name": "City"}, {"Name": "Urban"}, {"Name": "Building"}]}
```

on

```
Labs > Lab 9 > rekognition.py > ...
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "beach.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response['Labels'][0])
```

```
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "family.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response['Labels'][0])
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER Python + □

tent-length': '1373', 'date': 'Sat, 15 Oct 2022 08:54:55 GMT'}, 'RetryAttempts': 0}}
❸ (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
Traceback (most recent call last):
  File "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py", line 14, in <module>
    print(response['labels'][0])
KeyError: 'labels'
❹ (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
{'Name': 'High Rise', 'Confidence': 99.8785851542969, 'Instances': [], 'Parents': [{"Name": "City"}, {"Name": "Urban"}, {"Name": "Building"}]}
❺ (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
{'Name': 'Shorts', 'Confidence': 99.997839492188, 'Instances': [], 'Parents': [{"Name": "Clothing"}]}
```

Detecting Moderation

```
Labs > Lab 9 > rekognition.py > ...
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "family.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_moderation_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response)
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```
print(response['Labels'][0])
KeyError: 'Labels'
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '4aeacd4-7c41-4ca0-b8d7-6d85b384a042', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '4aeacd4-7c41-4ca0-b8d7-6d85b384a042', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:17:06 GMT', 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '44bbec01-5e43-463a-9ec3-3f36df043423', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '44bbec01-5e43-463a-9ec3-3f36df043423', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:18:35 GMT', 'RetryAttempts': 0}}
```

```
Labs > Lab 9 > rekognition.py > ...
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "quote.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_moderation_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response)
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```
833, 'Height': 0.5211047530174255, 'Left': 0.06724820286035538, 'Top': 0.37410953640937805}, 'Confidence': 94.48167419433594], 'Parents': [{'Name': 'Bird'}, {'Name': 'Animal'}]}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
Traceback (most recent call last):
  File "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py", line 14, in <module>
    print(response['Labels'][0])
KeyError: 'Labels'
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '4aeacd4-7c41-4ca0-b8d7-6d85b384a042', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '4aeacd4-7c41-4ca0-b8d7-6d85b384a042', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:17:06 GMT', 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
[{'ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '36019851-8534-463a-9ec3-3f36df043423', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '36019851-8534-4e91-981d-a3f24dd0fb84', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:19:05 GMT', 'RetryAttempts': 0}}]
```

```
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "urban.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_moderation_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response)
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```
6d85b384a042', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:17:06 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '44bbec01-5e43-463a-9ec3-3f36df043423', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '44bbec01-5e43-463a-9ec3-3f36df043423', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:18:35 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '36019851-8534-4e91-981d-a3f24dd0fb84', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:19:05 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$
```

```
Labs > Lab 9 > rekognition.py > ...
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "beach.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_moderation_labels(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response)
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

```
3f36df043423', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:18:35 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '36019851-8534-4e91-981d-a3f24dd0fb84', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '36019851-8534-4e91-981d-a3f24dd0fb84', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:19:05 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"
['ModerationLabels': [], 'ModerationModelVersion': '5.0', 'ResponseMetadata': {'RequestId': '8addff15-dd12-46cb-bb82-19d78618f307', 'HTTPStatusCode': 200, 'HTTPHeaders': {'x-amzn-requestid': '8addff15-dd12-46cb-bb82-19d78618f307', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15 Oct 2022 16:19:41 GMT'}, 'RetryAttempts': 0}}
• (venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$
```

Detecting Faces

```
1 import boto3
2
3 client = boto3.client('rekognition')
4 photo = "beach.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_faces(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        },
12    },
13 )
14 print(response)
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER Python +  
19d78618f307', 'content-type': 'application/x-amz-json-1.1', 'content-length': '54', 'date': 'Sat, 15  
22 16:19:41 GMT', 'RetryAttempts': 0}  
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/  
lachlan/Cloud/cits5503/Labs/Lab 9/rekognition.py"  
{'FaceDetails': [{ 'BoundingBox': { 'Width': 0.05273956432938576, 'Height': 0.0777654379606247, 'Left':  
0.7766892385754, 'Top': 0.1988364607957184}, 'Landmarks': [{ 'Type': 'eyeLeft', 'X': 0.4865491092205047,  
'y': 0.23561908304691315}, { 'Type': 'eyeRight', 'X': 0.5033573944857, 'Y': 0.240388391160965}, { 'Type':  
'earLeft', 'X': 0.48099809885205204, 'Y': 0.2587443590164186}, { 'Type': 'mouthRight', 'X': 0.49515315385,  
'Y': 0.2625892460346222}, { 'Type': 'nose', 'X': 0.494609236717241, 'Y': 0.2596617639064789}], 'Persons':  
[ { 'Roll': '7_08651304244951', 'Yaw': '23.937145529174805', 'Pitch': '-44.5390510559082', 'Quality': 'Bright',  
'Sharpness': 9.91290378570566}, { 'Confidence': 99.94508361816406}], 'ResponseMetadata': { 'RequestId':  
'530f1228-511e-49e8-a4c4-4074432alea', 'HTTPStatusCode': 200, 'HTTPHeaders': { 'x-amzn-requestid':  
'530f1228-511e-49e8-a4c4-4074432alea', 'content-type': 'application/x-amz-json-1.1', 'content-length':  
'680', 'date': 'Sat, 15 Oct 2022 16:22:05 GMT'}, 'RetryAttempts': 0}]
```

```
Labs > Lab 9 > rekoognition.py ...  
2  
3     client = boto3.client('rekognition')  
4     photo = "quote.jpeg"  
5     bucket_name = "22975276-cloudstorage3"  
6     response = client.detect_faces(  
7         Image={  
8             'S3Object': {  
9                 'Bucket': bucket_name,  
10                'Name': photo  
11            },  
12        },  
13    ),  
14    print(response)  
  
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER Python +  
  
': 'QUANTITY', 'Text': 'una', 'BeginOffset': 182, 'EndOffset': 185}, {'Score': 0.9596462845802307, 'Type': 'OTHER', 'Text': 'española', 'BeginOffset': 231, 'EndOffset': 239}, {'Score': 0.719598114490509, 'Type': 'QUANTITY', 'Text': 'una de las más traducidas', 'BeginOffset': 269, 'EndOffset': 294}, {'Score': 0.9852679967870249, 'Type': 'DATE', 'Text': '1615', 'BeginOffset': 299, 'EndOffset': 303}, {'Score': 0.94227135181427, 'Type': 'QUANTITY', 'Text': 'segunda parte', 'BeginOffset': 318, 'EndOffset': 331}, {'Score': 0.949765264987944, 'Type': 'TITLE', 'Text': 'Quijote de Cervantes', 'BeginOffset': 336, 'EndOffset': 356}, {'Score': 0.9898324638938904, 'Type': 'TITLE', 'Text': 'El ingenioso caballero don Quijote de la Mancha', 'BeginOffset': 374, 'EndOffset': 421}]}  
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/entities.py"  
[{'Index': 0, 'Entities': []}]  
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python "/home/lachlan/Cloud/cits5503/Labs/Lab 9/rekoognition.py"  
['FaceDetails': [], 'ResponseMetadata': {'RequestId': 'a3e37695-ca4a-4d40-aab3-4be9704a9b89', 'HTTPStatusCode': 200, 'Headers': {'x-amzn-requestid': 'a3e37695-ca4a-4d40-aab3-4be9704a9b89', 'content-type': 'application/x-amz-json-1.1', 'content-length': '18', 'date': 'Sun, 16 Oct 2022 07:33:47 GMT'}, 'RetryAttempts': 0}]
```

```
git: Lao 9 · 7 · 2 · (Recognition.py) ...
```

```
2
3 client = boto3.client('rekognition')
4 photo = "urban.jpeg"
5 bucket_name = "22975276-cloudstorage3"
6 response = client.detect_faces(
7     Image={
8         'S3Object': {
9             'Bucket': bucket_name,
10            'Name': photo
11        }
12    },
13 )
14 print(response)
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
```

```
246398898904: Type: 'TITLE', 'Text': 'El ingenioso caballero don Quijote de la Mancha', 'BeginOffset': 374, 'EndOffset': 421}]]>
(lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python ~/home/lachlan/Cloud/cits5503/Labs/9/entities.py
[{"Index": 0, "Entities": []}]
(lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python ~/home/lachlan/Cloud/cits5503/Labs/9/entities.py
[{"FaceDetails": {}, "ResponseMetadata": {"RequestId": "a3e37695-c4d4-4d40-ab3b-4b97049a890", "HTTPStatusCode": 200, "RequestId": "a3e37695-c4d4-4d40-ab3b-4b97049a890", "Content-Type": "application/x-amz-json-1.1", "Content-Length": 18, "Date": "Sun, 15 Oct 2022 16:22:51 GMT"}, "RetryAttempts": 0}}
(venv) lachlan@lachlan-VirtualBox:~/Cloud/cits5503$ /home/lachlan/Cloud/cits5503/venv/bin/python ~/home/lachlan/Cloud/cits5503/Labs/9/rekognition.py
[{"FaceDetails": {}, "ResponseMetadata": {"RequestId": "3de9ff7a-f8f7-4d1a-8326-66f91c137f1", "HTTPStatusCode": 200, "RequestId": "3de9ff7a-f8f7-4d1a-8326-66f91c137f1", "Content-Type": "application/x-amz-json-1.1", "Content-Length": 18, "Date": "Sun, 16 Oct 2022 07:34:22 GMT"}, "RetryAttempts": 0}]
```

Detecting Text

```
client = boto3.client('rekognition')
photo = "urban.jpeg"
bucket_name = "22975276-cloudstorage3"
response = client.detect_text(
    Image={
        'S3Object': {
            'Bucket': bucket_name,
            'Name': photo
        },
    },
)
print(response)
```

```
client = boto3.client('rekognition')
photo = "beach.jpeg"
bucket_name = "22975276-cloudstorage3"
response = client.detect_text(
    Image={
        'S3Object': {
            'Bucket': bucket_name,
            'Name': photo
        },
    },
)
print(response)
```

```
2
3     client = boto3.client('rekognition')
4     photo = "family.jpeg"
5     bucket_name = "22975276-cloudstorage3"
6     response = client.detect_text([
7         {
8             'Image': {
9                 'S3Object': {
10                     'Bucket': bucket_name,
11                     'Name': photo
12                 }
13             }
14         }
15     ])
16
17     print(response)
```