1. What is Rekognizing patterns?
   Amazon Rekognition makes it easy to add image and video analysis to your applications. You just provide an image or video to the Amazon Rekognition API, and the service can identify objects, people, text, scenes, and activities. It can detect any inappropriate content as well. Amazon Rekognition also provides highly accurate facial analysis, face comparison, and face search capabilities. You can detect, analyze, and compare faces for a wide variety of use cases, including user verification, cataloging, people counting, and public safety.

2. How can we upload image using boto3 ?

Initialize S3 Client

```
s3 = boto3.client(
   's3', region_name='us-east-1',
   aws_access_key_id=AWS_KEY_ID, aws_secret_access_key=AWS_SECRET
)
```

Upload a file

```
s3.upload_file(
   Filename='report.jpg', Key='report.jpg',
   Bucket='datacamp-img')
```

Object detection

INITIATE THE CLIENT

```python
rekog = boto3.client(
    'rekognition',
    region_name='us-east-1',
    aws_access_key_id=AWS_KEY_ID,
    aws_secret_access_key=AWS_SECRET)
```

DETECT!

```python
response = rekog.detect_labels(
    Image={'S3Object': {
            'Bucket': 'datacamp-img',
            'Name': 'report.jpg'
        },
    MaxLabels=10,
    MinConfidence=95
)
```

Text detection

PERFORM DETECTION

```python
response = rekog.detect_text(
    Image={'S3Object':
            {
                'Bucket': 'datacamp-img',
                'Name': 'report.jpg'
            }
        }
)
```

Comprehending text

Translating text

Initialize client

```python
translate = boto3.client('translate',
    region_name='us-east-1',
    aws_access_key_id=AWS_KEY_ID, aws_secret_access_key=AWS_SECRET)
```

Translate text

```python
response = translate.translate_text(
    Text='Hello, how are you?',
    SourceLanguageCode='auto',
    TargetLanguageCode='es')
```

Detecting language

Initialize boto3 Comprehend client

```python
comprehend = boto3.client('comprehend',
    region_name='us-east-1',
    aws_access_key_id=AWS_KEY_ID, aws_secret_access_key=AWS_SECRET)
```

Detect dominant language

```python
response = comprehend.detect_dominant_language(
  Text="Hay basura por todas partes a lo largo de la carretera.")
```

Understanding sentiment

Detect text sentiment

```python
response = comprehend.detect_sentiment(
    Text="DataCamp students are amazing.",
    LanguageCode='en')
```

Understanding sentiment

```
{'Sentiment': 'POSITIVE',
 'SentimentScore': {'Positive': 0.9827685952186584
  'Negative': 0.00060651281234249473,
  'Neutral': 0.012124153785407543,
  'Mixed': 0.004502176772803068},
```