In [1]:
```
import boto3
```

In [2]:
```
s3 = boto3.resource('s3',
                    aws_access_key_id=[redacted],
                    aws_secret_access_key=[redacted]
                   )
```

In [3]:
```
try:
    s3.create_bucket(Bucket='datacont-mo', CreateBucketConfiguration={
        'LocationConstraint': 'us-west-2'})
except:
    print("this may already exist")
```

```
this may already exist
```

In [4]:
```
bucket = s3.Bucket("datacont-mo")
```

In [5]:
```
bucket.Acl().put(ACL='public-read')
```

Out[5]:
```
{'ResponseMetadata': {'RequestId': 'SZF0TXKPZXPMKDZC',
  'HostId': 'GRsdU0EieQOlxVOL0ciwCpiWI8DZRbYiDGoh6fTFoYaB6q19JhXT6+4QlpPZbVcO/REYP4Y3ZDU
=',
  'HTTPStatusCode': 200,
  'HTTPHeaders': {'x-amz-id-2': 'GRsdU0EieQOlxVOL0ciwCpiWI8DZRbYiDGoh6fTFoYaB6q19JhXT6+4
QlpPZbVcO/REYP4Y3ZDU=',
   'x-amz-request-id': 'SZF0TXKPZXPMKDZC',
   'date': 'Mon, 08 Mar 2021 22:34:56 GMT',
   'content-length': '0',
   'server': 'AmazonS3'},
  'RetryAttempts': 0}}
```

In [6]:
```
body = open('C:/Users/muhad/OneDrive/Desktop/Pitt - Spring 2021/CS 1660 - Intro to Clou
```

In [7]:
```
o = s3.Object('datacont-mo', 'test').put(Body=body )
```

In [8]:
```
s3.Object('datacont-mo', 'test').Acl().put(ACL='public-read')
```

Out[8]:
```
{'ResponseMetadata': {'RequestId': 'SZF0T79T5R72X5P3',
  'HostId': 'iMrYrGnxSHqIOfPI/GRh8RZE7o0jdaedQfWhFot8CxEx8fbGPrlpwyaf2I4AQ7jNRG1FYsV4hnM
=',
  'HTTPStatusCode': 200,
  'HTTPHeaders': {'x-amz-id-2': 'iMrYrGnxSHqIOfPI/GRh8RZE7o0jdaedQfWhFot8CxEx8fbGPrlpwya
f2I4AQ7jNRG1FYsV4hnM=',
   'x-amz-request-id': 'SZF0T79T5R72X5P3',
   'date': 'Mon, 08 Mar 2021 22:34:56 GMT',
   'content-length': '0',
   'server': 'AmazonS3'},
  'RetryAttempts': 0}}
```

In [9]:
```
dyndb = boto3.resource('dynamodb',
                       region_name='us-west-2',
```

```
                    aws_access_key_id=[redacted],
                    aws_secret_access_key=[redacted]
)
```

In [10]:
```
try:
    table = dyndb.create_table(
    TableName='DataTable',
    KeySchema=[
        {
            'AttributeName': 'PartitionKey',
            'KeyType': 'HASH'
        },
        {
            'AttributeName': 'RowKey',
            'KeyType': 'RANGE'
        }
    ],
    AttributeDefinitions=[
        {
            'AttributeName': 'PartitionKey',
            'AttributeType': 'S'
        },
        {
            'AttributeName': 'RowKey',
            'AttributeType': 'S'
        },
    ],
    ProvisionedThroughput={
            'ReadCapacityUnits': 5,
            'WriteCapacityUnits': 5
        }
    )
except:
    #if there is an exception, the table may already exist. if so...
    table = dyndb.Table("DataTable")
```

In [11]:
```
table.meta.client.get_waiter('table_exists').wait(TableName='DataTable')
```

In [12]:
```
print(table.item_count)
```

```
2
```

In [13]:
```
import csv
```

In [14]:
```
with open('C:/Users/muhad/OneDrive/Desktop/Pitt - Spring 2021/CS 1660 - Intro to Cloud
    csvf = csv.reader(csvfile, delimiter=',', quotechar='|')
    next(csvf)
    for item in csvf:
        print(item)
        body = open('C:/Users/muhad/OneDrive/Desktop/Pitt - Spring 2021/CS 1660 - Intro
        s3.Object('datacont-mo', item[4]).put(Body=body)
        md = s3.Object('datacont-mo', item[4]).Acl().put(ACL='public-read')

        url = " https://s3-us-west-2.amazonaws.com/datacont-mo/" + item[4]
        metadata_item = {'PartitionKey': item[0], 'RowKey': item[1],
```

```
                        'description' : item[3], 'date' : item[2], 'url':url}
        try:
            table.put_item(Item=metadata_item)
        except:
            print("item may already be there or another failure")
```

```
['experiment1', '1', '2/13/2021', 'first experiment', 'exp1.csv']
['experiment2', '2', '2/20/2021', 'second experiment', 'exp2.csv']
```

In [15]:

```
response = table.get_item(
    Key={
            'PartitionKey': 'experiment2',
            'RowKey': '2'
        }
)
item = response['Item']
print(item)
```

```
{'PartitionKey': 'experiment2', 'RowKey': '2', 'date': '2/20/2021', 'description': 'seco
nd experiment', 'url': ' https://s3-us-west-2.amazonaws.com/datacont-mo/exp2.csv'}
```

In [16]:

```
response
```

Out[16]:

```
{'Item': {'PartitionKey': 'experiment2',
  'RowKey': '2',
  'date': '2/20/2021',
  'description': 'second experiment',
  'url': ' https://s3-us-west-2.amazonaws.com/datacont-mo/exp2.csv'},
 'ResponseMetadata': {'RequestId': 'A6NHAEM2EKFFGEB97V6ID2RFSVVV4KQNSO5AEMVJF66Q9ASUAAJ
G',
  'HTTPStatusCode': 200,
  'HTTPHeaders': {'server': 'Server',
   'date': 'Mon, 08 Mar 2021 22:34:57 GMT',
   'content-type': 'application/x-amz-json-1.0',
   'content-length': '200',
   'connection': 'keep-alive',
   'x-amzn-requestid': 'A6NHAEM2EKFFGEB97V6ID2RFSVVV4KQNSO5AEMVJF66Q9ASUAAJG',
   'x-amz-crc32': '3848063966'},
  'RetryAttempts': 0}}
```

In [ ]: