

## AWS Account:

The screenshot shows the AWS IAM console interface. The left sidebar contains navigation links for Identity and Access Management (IAM), including Dashboard, Access management, Access reports, and Credential report. The main content area displays a table of users. A search bar at the top allows finding users by username or access key. The table shows one user, 'tester', with details on groups, access key age, password age, last activity, and MFA status.

User name	Groups	Access key age	Password age	Last activity	MFA
tester	tester	Today	None	Today	Not enabled

## Boto3 Installation:

```
Microsoft Windows [Version 10.0.18363.1440]
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C:\Users\jarod_000>pip install boto3
Collecting boto3
  Downloading boto3-1.17.27-py2.py3-none-any.whl (130 kB)
    | 130 kB 6.4 MB/s
Collecting jmespath<1.0.0,>=0.7.1
  Downloading jmespath-0.10.0-py2.py3-none-any.whl (24 kB)
Collecting botocore<1.21.0,>=1.20.27
  Downloading botocore-1.20.27-py2.py3-none-any.whl (7.3 MB)
    | 7.3 MB 3.3 MB/s
Collecting s3transfer<0.4.0,>=0.3.0
  Downloading s3transfer-0.3.4-py2.py3-none-any.whl (69 kB)
    | 69 kB 4.5 MB/s
Collecting urllib3<1.27,>=1.25.4
  Downloading urllib3-1.26.3-py2.py3-none-any.whl (137 kB)
    | 137 kB 3.2 MB/s
Requirement already satisfied: python-dateutil<3.0.0,>=2.1 in c:\users\jarod_000\appdata\local\programs\python\python38\lib\site-packages (from botocore<1.21.0,>=1.20.27->boto3) (2.8.1)
Requirement already satisfied: six>=1.5 in c:\users\jarod_000\appdata\local\programs\python\python38\lib\site-packages (from python-dateutil<3.0.0,>=2.1->botocore<1.21.0,>=1.20.27->boto3) (1.13.0)
Installing collected packages: jmespath, urllib3, botocore, s3transfer, boto3
Successfully installed boto3-1.17.27 botocore-1.20.27 jmespath-0.10.0 s3transfer-0.3.4 urllib3-1.26.3
WARNING: You are using pip version 20.1.1; however, version 21.0.1 is available.
You should consider upgrading via the 'c:\users\jarod_000\appdata\local\programs\python\python38\python.exe -m pip install --upgrade pip' command.

C:\Users\jarod_000>
```

## Full Code:

```
AWSHWWithoutKeys.py  experiments.csv
1  import boto3
2  import csv
3
4  s3 = boto3.resource('s3', aws_access_key_id = '', aws_secret_access_key = '')
5
6  try:
7      s3.create_bucket(Bucket = 'myawsbucket88472', CreateBucketConfiguration = {'LocationConstraint': 'us-east-2'})
8  except:
9      print("bucket may already exist")
10
11  #s3.Object('myawsbucket88472', 'test.png').put(Body=open('C:\\Users\\jarod_000\\Desktop\\CS 1660\\AWS HW\\test.png', 'rb'))
12
13  dyndb = boto3.resource('dynamodb', region_name = 'us-east-2', aws_access_key_id = '', aws_secret_access_key = '')
14
15  table = ""
16
17  try:
18      table = dyndb.create_table(
19          TableName = 'DataTable',
20          KeySchema = [
21              {'AttributeName': 'PartitionKey', 'KeyType': 'HASH'},
22              {'AttributeName': 'RowKey', 'KeyType': 'RANGE'}
23          ],
24          AttributeDefinitions = [
25              {'AttributeName': 'PartitionKey', 'AttributeType': 'S'},
26              {'AttributeName': 'RowKey', 'AttributeType': 'S'}
27          ],
28          ProvisionedThroughput={
29              'ReadCapacityUnits': 5,
30              'WriteCapacityUnits': 5
31          }
32      )
33  except:
34      table = dyndb.Table("DataTable")
35
36  table.meta.client.get_waiter('table_exists').wait(TableName = 'DataTable')
37
38  print(table.item_count)
39
40  urlbase = "https://s3-us-east-2.amazonaws.com/myawsbucket88472/"
41  with open('C:\\Users\\jarod_000\\Desktop\\CS 1660\\AWS HW\\datafiles\\experiments.csv', 'r') as csvfile:
42      csvf = csv.reader(csvfile, delimiter=',', quotechar='"')
43      next(csvf) # Skip header
44      for item in csvf:
45          print(item)
46          body = open('C:\\Users\\jarod_000\\Desktop\\CS 1660\\AWS HW\\datafiles\\'+item[4], 'rb')
47          s3.Object('myawsbucket88472', item[3]).put(Body=body)
48          md = s3.Object('myawsbucket88472', item[3]).Acl().put(ACL='public-read')
49
50          url = "https://s3-us-east-2.amazonaws.com/myawsbucket88472/"+item[4]
51          metadata_item = {'PartitionKey': item[0], 'RowKey': item[1],
52                          'description': item[4], 'date': item[2], 'url':url}
53          try:
54              table.put_item(Item=metadata_item)
55          except:
56              print("item may already be there or another failure")
57
58  response = table.get_item(
59      Key={
60          'PartitionKey': 'experiment2',
61          'RowKey': 'data2'
62      }
63  )
64
65  item = response['Item']
66  print(item)
67
```

Query to DB:

```
58 response = table.get_item(  
59     Key={  
60         'PartitionKey': 'experiment2',  
61         'RowKey': 'data2'  
62     }  
63 )  
64  
65 item = response['Item']  
66 print(item)  
67
```

Response from DB:

```
Command Prompt  
Microsoft Windows [Version 10.0.18363.1440]  
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C:\Users\jarod_000>cd Desktop  
  
C:\Users\jarod_000\Desktop>cd "CS 1660"  
  
C:\Users\jarod_000\Desktop\CS 1660>cd "AWS HW"  
  
C:\Users\jarod_000\Desktop\CS 1660\AWS HW>python AWSHW.py  
bucket may already exist  
exception in creating table  
0  
['experiment1', 'data1', '2/13/2021', 'Words..', 'exp1.csv']  
['experiment2', 'data2', '2/20/2021', 'second experiment', 'exp2.csv']  
{'PartitionKey': 'experiment2', 'RowKey': 'data2', 'date': '2/20/2021', 'description': 'exp2.csv', 'url': 'https://s3-us  
-east-2.amazonaws.com/myawsbucket88472/exp2.csv'}  
  
C:\Users\jarod_000\Desktop\CS 1660\AWS HW>
```