**Boto3**

* This is AWS SDK for python
* To install this pip install boto3
* Documentation of boto3 <https://boto3.amazonaws.com/v1/documentation/api/latest/index.html>
* Sample python code to list all the s3 buckets

import boto3

def print\_s3\_buckets():

"""This method will print all the s3 buckets

"""

s3 = boto3.resource('s3')

for bucket in s3.buckets.all():

print(bucket.name)

if \_\_name\_\_ == '\_\_main\_\_':

print\_s3\_buckets()

* Now lets try to create an lambda function which does the samething.
  + Created a lamdba function with code
* import json
* import boto3
* def lambda\_handler(event, context):
* s3\_buckets = list\_s3\_buckets()
* response\_dict = dict()
* response\_dict['buckets'] = s3\_buckets
* response\_dict['count'] = len(s3\_buckets)

* return {
* 'statusCode': 200,
* 'body': json.dumps(response\_dict)
* }
* def list\_s3\_buckets():
* """This method will print all the s3 buckets
* """
* s3 = boto3.resource('s3')
* s3\_list = []
* for bucket in s3.buckets.all():
* s3\_list.append(bucket.name)
* return s3\_list
  + When i executed this lambda function using test method i got the following response
* Exercise: Lets create two ec2 instances
  + instance-1: Tag: Name: web1
  + instance-2: Tag: Name: web2
* Code in python

import boto3

def get\_ec2\_instance\_id(key='Name', value='Web1'):

ec2 = boto3.client('ec2')

response = ec2.describe\_instances(Filters = [

{

'Name': f'tag:{key}',

'Values': [

value,

]

}])

#print(response)

instance\_id = response['Reservations'][0]['Instances'][0]['InstanceId']

return instance\_id

def stop\_ec2(instance\_id):

ec2 = boto3.client('ec2')