**BDM 3203 - Hadoop Ecosystems for Big Data 01**

**Assignment 2**

**Submitted by: Group E**

**Student IDs:**

**Aadarsha Chapagain(C0825975)**

**Roshan Acharya (C0831342)**

**Anjana Kuriakose**

**(C0829580)**

**Onyinye Mbanefo (C0831578)**

**Submitted to: Prof. Teresa Zhu**

**Create a Dynamo DB in AWS and choose any dataset (MUST BE APPROVED BY YOUR INSTRUCTOR) then run a few queries (7-10 queries based on the business questions you create)**

**Implement and take screenshots with time stamps and upload your report.**

**Screenshots**

**Upload the sample file to S3:**

**A screenshot of a computer

Description automatically generated**

**Use Import from S3 feature of dynamodb to import data from S3 to Dynamodb**

**A screenshot of a computer

Description automatically generated**

**Create a role in IAM to access dynamo DB using Lambda**

**Graphical user interface, text, website

Description automatically generated**

**Create Lambda Functions**

**Graphical user interface, text, application, email

Description automatically generated**

**Use boto Library to perform queries in dynamo DB**

1. **Table.scan()**

**import boto3**

**def lambda\_handler(event, context):**

**client = boto3.resource("dynamodb")**

**table = client.Table("Sales\_table")**

**projections = table.scan**

**print("Projections:",projections)**

**# TODO implement**

**return None**

**Graphical user interface, text, application

Description automatically generated**

**Get\_item**

**import boto3**

**def lambda\_handler(event, context):**

**dynamodb = boto3.resource('dynamodb')**

**table = dynamodb.Table('Sales\_data')**

**response = table.get\_item(**

**Key={**

**'Invoice ID': '560-30-5617'**

**}**

**)**

**print("response:",response)**

**return None**

**Graphical user interface, application, Word

Description automatically generated**

**def lambda\_handler(event, context):**

**dynamodb = boto3.resource('dynamodb')**

**table = dynamodb.Table('Sales\_data')**

**response = table.get\_item(**

**Key={**

**'Branch': 'B'**

**}**

**)**

**print("response:",response)**

**return None**

Graphical user interface, text, application

Description automatically generated

1. **Projection Expressions**

**import boto3**

**def lambda\_handler(event, context):**

**dynamodb = boto3.resource('dynamodb')**

**table = dynamodb.Table('Sales\_data')**

**resp = table.scan(ProjectionExpression="City, cogs")**

**print("response:",resp)**

**return None**

**Graphical user interface, text, application

Description automatically generated**

1. KeyCondition Expression

import json

import boto3

from boto3.dynamodb.conditions import Key

def lambda\_handler(event, context):

dynamodb = boto3.resource('dynamodb')

table = dynamodb.Table('Sales\_data')

resp = table.query(

KeyConditionExpression=

Key('Branch').eq('B') & Key('Customer Type').eq('Normal')

)

print(resp['Items'][0])

return None

import json

import boto3

def lambda\_handler(event, context):

dynamodb = boto3.resource('dynamodb')

table = dynamodb.Table('Sales\_data')

response = table.delete\_item(

Key={

'Invoice ID': '849-09-3807',

},

)

return None

Summary

We have uploaded the data to AWS s3 imported it to Dynamodb and perform several queries using lamda function.

Reference

<https://www.youtube.com/watch?v=8zhv6GDSDE8&ab_channel=JustmeandOpensource>

<https://highlandsolutions.com/blog/hands-on-examples-for-working-with-dynamodb-boto3-and-python>