Day 29 - 30th Aug 2025

| Dynamo DB | Overview of AWS DynamoDB, Terminology Comparison with SQL, DynamoDB Tables and Naming,Conventions, Data, DynamoDB Consistency Model, DynamoDB Capacity Units, DynamoDB On Demand Capacity, Basics of DynamoDB Partitions, Basics of DynamoDB Indexes, Local Secondary Indexes and Global Secondary Indexes |
| --- | --- |
| Working with DynamoDB using AWS Console3 | Interacting with DynamoDB -Table-level Operations with AWS Console, Item-level Operations with AWS Console, Additional Features in DynamoDB Console |
| Working with DynamoDB using AWS CL | Working with the AWS CLI, Table level Operations with AWS CLI, Write Operations - Item level Operations with AWS CLI, Read Operations - Item level Operations with AWS CLI |
| Working with DynamoDB using AWS SDK | Working with DynamoDB using AWS SDK - Introduction, Table-level Operations with AWS SDK, Write Operations - Item Level Operations with AWS SDK, Conditional Writes - Item Level Operations with AWS SDK, Atomic Counters - Item Level Operations with AWS SDK, Read Operations - Item Level Operations with AWS SDK, Paginated Reads - Item Level Operations with AWS SDK |
| DynamoDB Data Modeling & Best Practices | DynamoDB Architecture, DynamoDB Partitions in Depth, DynamoDB Efficient Key Design, Hot Keys or Hot Partitions, DynamoDB Design Patterns, Multi-value Sorts and Filters, DynamoDB Limits - Error Handling in DynamoDB, Ways to Lower DynamoDB Costs |

Overview of AWS DynamoDB

Step 1:

Create an account as root user in Amazonaws

Step 2:

SDK install (JDK nee to be there)

Open cmd in the same location where you installed SDK

java -Djava.library.path=./DynamoDBLocal\_lib -jar DynamoDBLocal.jar -sharedDb

Step 3:

NoSQl workbench - DynamoDB

If done with above 3 steps plz raise your hands..

25 + 3 =28 out of 33 pax done

By 14.50

Task 01:

Above installation Process

Task 02:

Create a table in NoSQL workbench - DynamoDB

15.25 to 15.30

Task 03:

Create different connections with different nos and see if it works … (also commit table to the DynamoDB.

Task 04:

AWS CLI:

<https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html>

After downloading MSI… install and then in cmd check for AWS version no

AWS - -Version

After AWS CLI setup is done … the ss is as below

In the search open AWS CLI

The amazon cli .. bin folder will be there in C:/programfile/amazon/awscli/bin..

Plz set the path in env..

(juz as you used to do for java)

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creating table using cli

aws dynamodb create-table

--table-name Employee

--attribute-definitions

AttributeName=Empname,AttributeType=S

AttributeName=Address,AttributeType=S

--key-schema

AttributeName=EmpDesig,KeyType=HASH

AttributeName=Empno,Keytype=RANGE

--billing-mode PAY-PER-REQUEST

--table-class STANDAED

CAP theorem

Info Box

Excalidraw updated at 10.35

<https://excalidraw.com/#json=nnj6SG4x2DK356NAcSFCb,0O5S81_CQ3JJ04U97ovWlg>

<https://excalidraw.com/#json=DpBTUUGx-krHIG1-lHCPD,p-YiqSUbwf4_uuyhjP0d2Q>

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DynamoDB amazon SDK for java

<https://docs.aws.amazon.com/sdk-for-java/v1/developer-guide/examples-dynamodb.html>

Instead of above link use below link for version 2

<https://docs.aws.amazon.com/sdk-for-java/latest/developer-guide/home.html>

Direct link to down load:

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DynamoDBLocal.DownloadingAndRunning.html#DynamoDBLocal.DownloadingAndRunning.title>

Extract the zip fle

In the cmd

Go to the location where you have extracted dynamolocal and

type:

java -Djava.library.path=./DynamoDBLocal\_lib -jar DynamoDBLocal.jar -sharedDb

No SQL workBench for DynamoDB

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/workbench.html>