**AWS Cloud Training**

AWS DYNAMODB
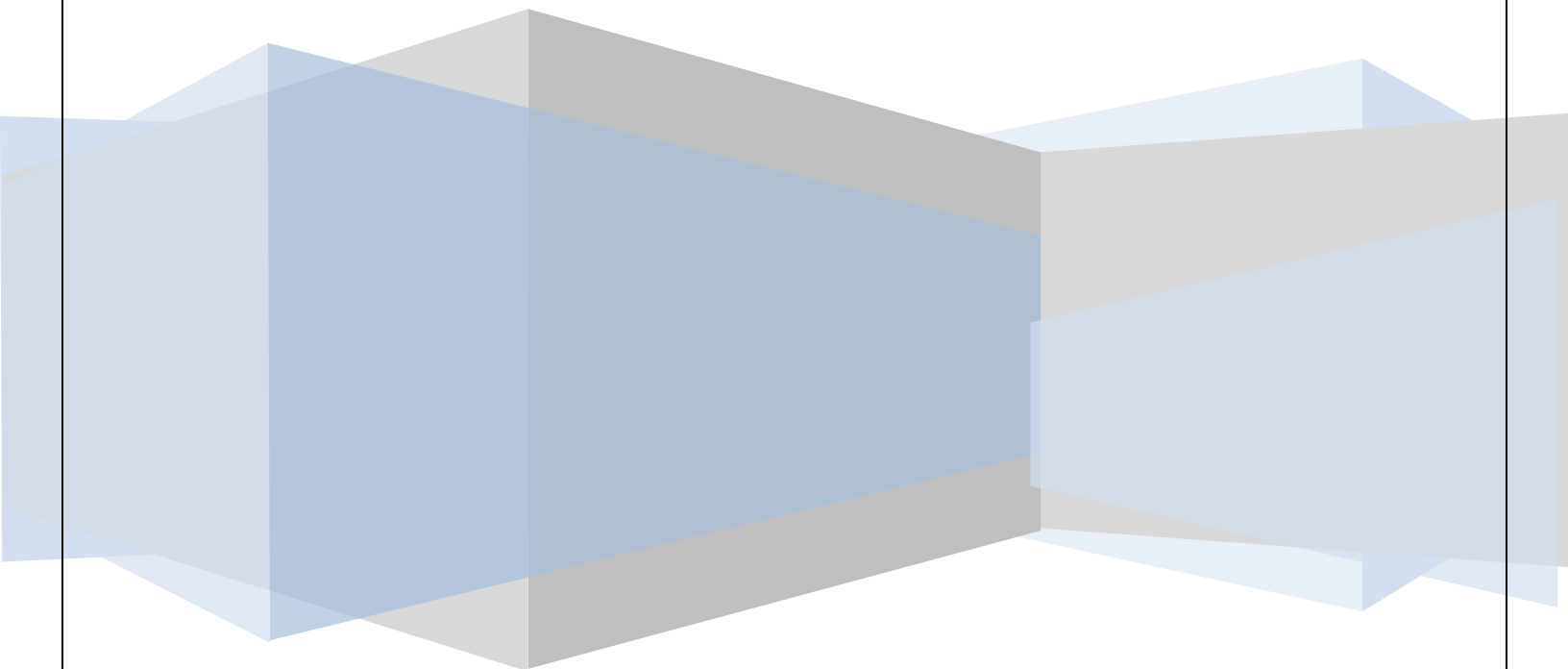
DYNAMODB INTRODUCTION

Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. DynamoDB lets you offload the administrative burdens of operating and scaling a distributed database, so that you don't have to worry about hardware provisioning, setup and configuration, replication, software patching, or cluster scaling.

From the Aws Console page choose DynamoDB under Database section.
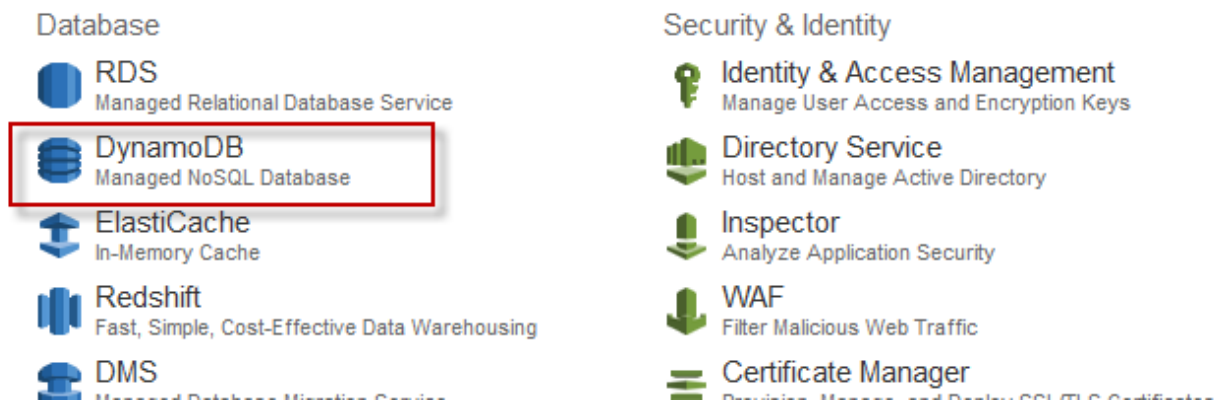
Choose Create table to create a new one.

On the next page, specify table name as orders, and primary key as order_id and choose type as Number.
Then choose Create.

Create DynamoDB table

DynamoDB is a schema-less database that only requires a table name and primary key. The table's primary key is made up of one or two attributes that uniquely identify items, partition the data, and sort data within each partition.

Table name*   orders   ℹ️

Primary key*   Partition key

order_id   Number ⌄ ℹ️

☐ Add sort key

Table settings

Default settings provide the fastest way to get started with your table. You can modify these default settings now or after your table has been created.

☑ Use default settings

- No secondary indexes.
- Provisioned capacity set to 5 reads and 5 writes.
- Basic alarms with 80% upper threshold using SNS topic "dynamodb".

Additional charges may apply if you exceed the AWS Free Tier levels for CloudWatch or Simple Notification Service. Advanced alarm settings are available in the CloudWatch management console.

Cancel   **Create**

You can see status as table is being created.

Create table   Actions ⌄

🔍 Filter by table name   ✕

Name	
↻ orders	

orders   Close

Overview | Items | Metrics | Alarms | Capacity | Indexes | Access contro

↻ Table is being created

Recent alerts

No CloudWatch alarms have been triggered for this table.

Stream details

Stream enabled   No

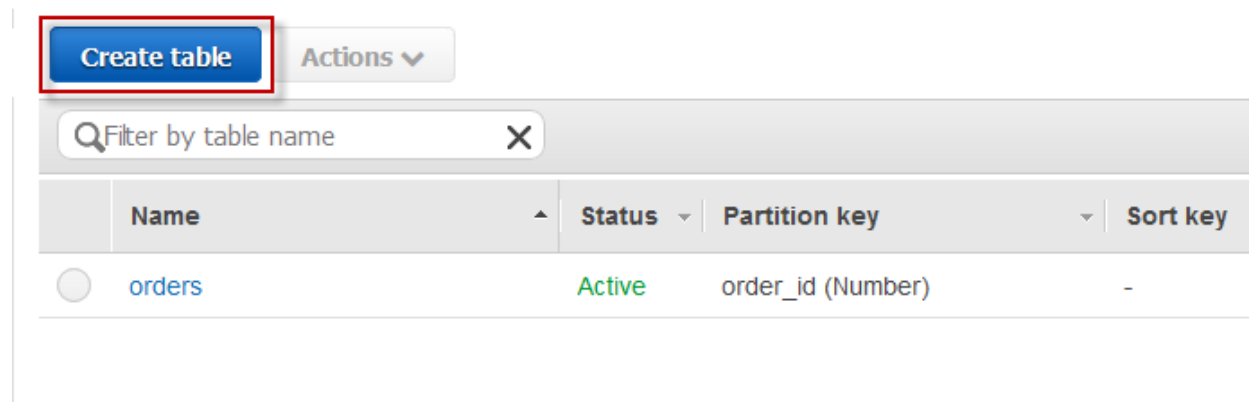Once created you can see the table status is Active under Overview of Table.

Create table	Actions ∨

orders   Close

| Overview | Items | Metrics | Alarms | Capacity | Indexes | Access control |

No CloudWatch alarms have been triggered for this table.

Stream details

Stream enabled	No
View type	-
Latest stream ARN	-

Manage Stream

Table details

Table name	orders
Primary partition key	order_id (Number)
Primary sort key	-
Table status	Active
Creation date	May 7, 2016 at 12:55:49 AM UTC+5:30
Provisioned read capacity units	5

Filter by table name

Name
● orders

Now will try to create a table with both Partition key and sort key, with the following format.

Order ID	Line Number	Product ID	Status
630178	1	99717	unshipped
630178	2	90127	unshipped
607161	1	98379	shipped
672102	1	95326	shipped
672102	2	95671	unshipped
672102	3	94023	shipped
690727	1	95502	shipped

Choose create table to create a new one.

Name		Status		Partition key		Sort key
orders		Active		order_id (Number)		-

Then specify table name as order_line_items.
Specify partition key as order_id and sort key as line_number, make both has Number and choose Create.

DynamoDB is a schema-less database that only requires a table name and primary key. The table's primary key is made up of one or two attributes that uniquely identify items, partition the data, and sort data within each partition.
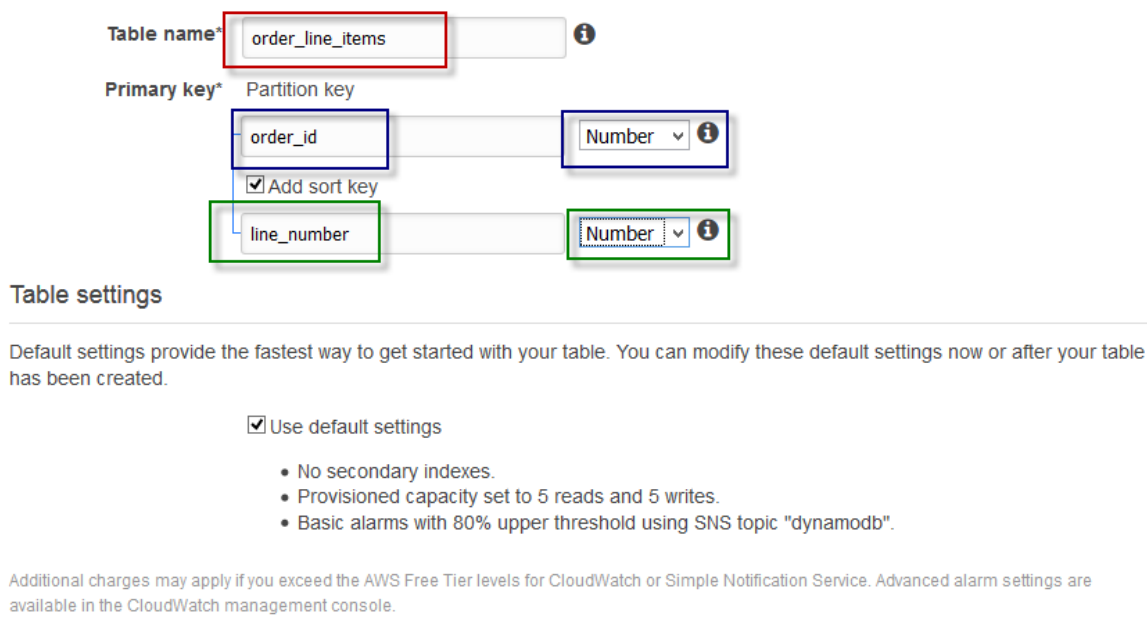
Table name* order_line_items

Primary key*   Partition key

order_id   Number

☑ Add sort key

line_number   Number

Table settings

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Cancel   Create

Once created, select table go to Items on right pane.
Then choose Create Item to create a new one.
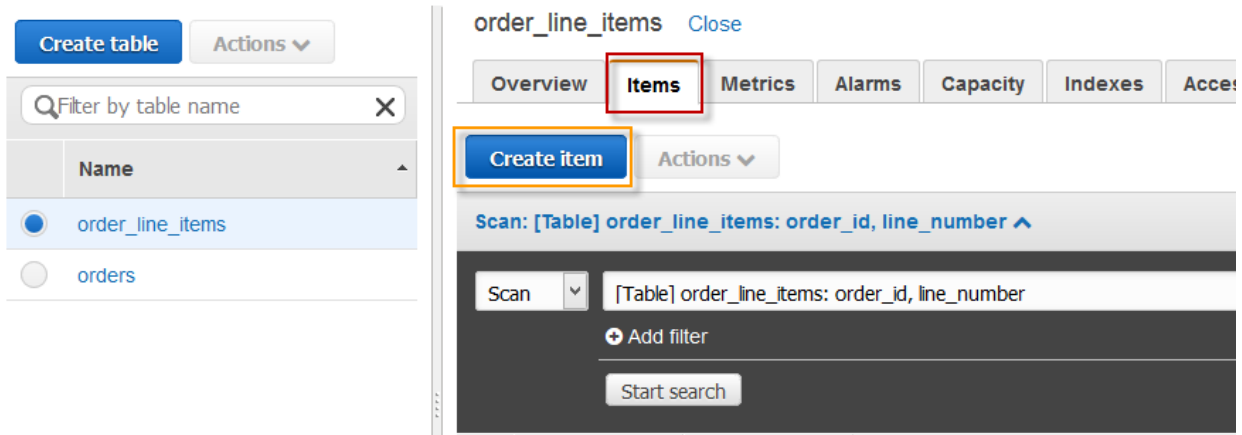
Specify order_id and line_number.
Then choose plus (+) symbol on line_number and select append choose Number.
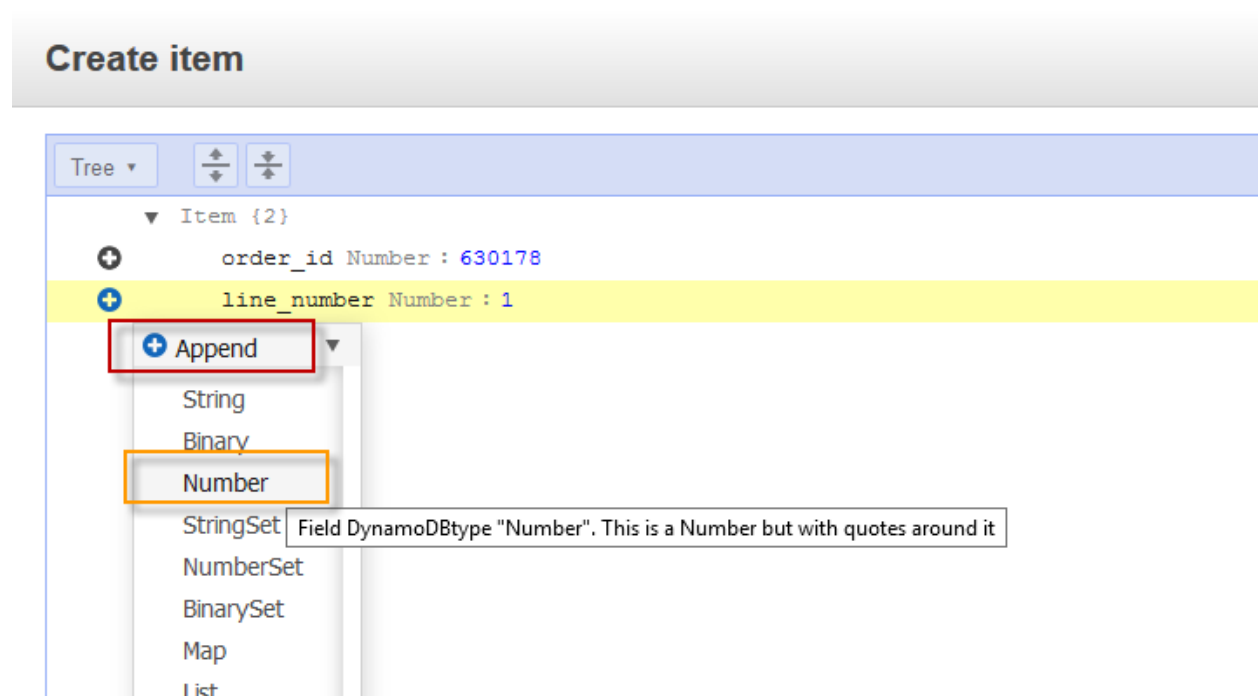
Then specify Field as product_id and specify value as 99717

Create item

| Tree ▾ |

▼ Item {3}
- ⊕   order_id Number : 630178
- ⊕   line_number Number : 1
- ⊕   product_id Number : 99717

Then try to append a new value, but this time choose as string instead of number. Then choose save button save.

Create item   ✕

| Tree ▾ |

▼ Item {4}
- ⊕   order_id Number : 630178
- ⊕   line_number Number : 1
- ⊕   product_id Number : 99717
- ⊕   status String : unshipped

Cancel   **Save**

Then create all items as specified on the above screen shot.

If you want to delete an item, choose the item, select Delete under Actions drop down menu.

To edit the item, select the item, then choose pencil symbol which is hovering near item value.

Then change the item value and choose save.
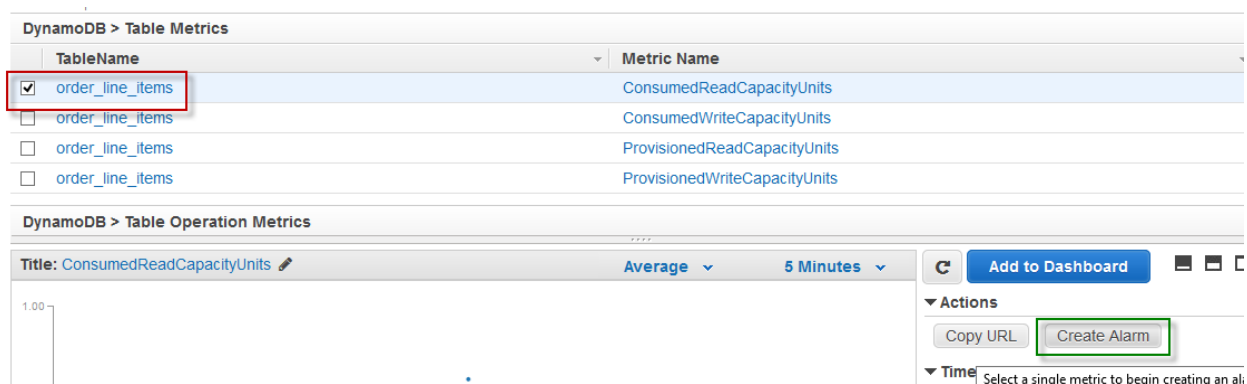
CONFIGURING ALARMS FOR DYNAMODB

Select your table, choose metrics from right pane, and then choose View all cloudwatch metrics.
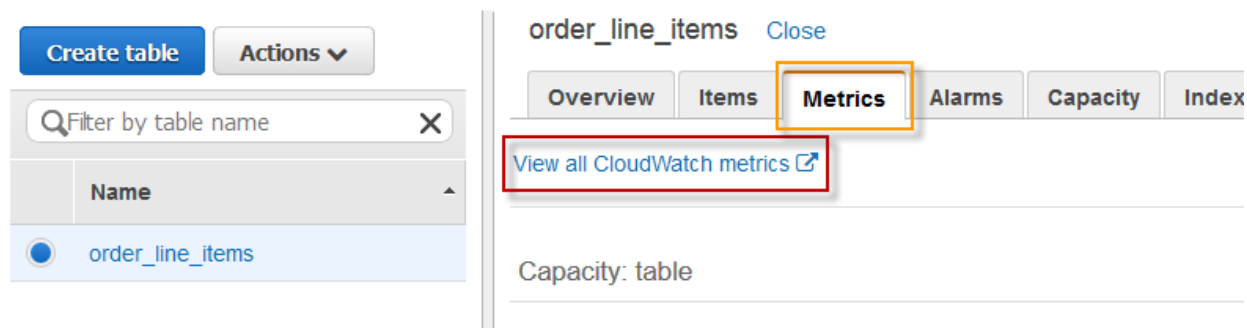
Under CloudWatch, choose DynamoDB Metrics.
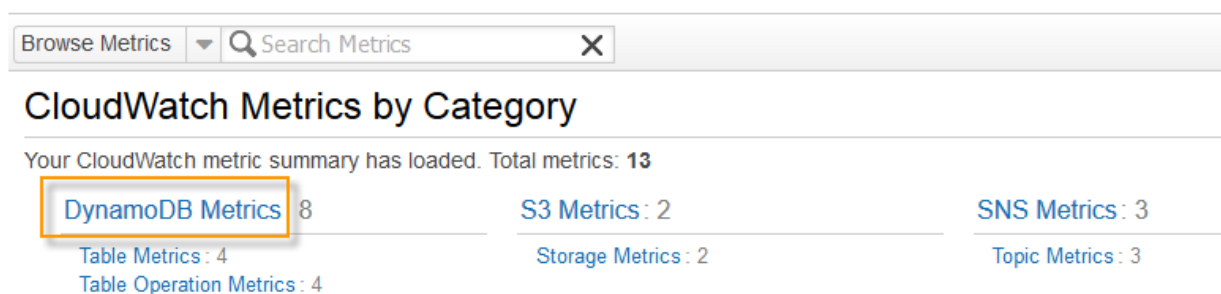
Choose an Alarm, choose Create Alarm from below right pane.

Specify a name and add a description, then configure RCU as per your requirements.

Choose SNS topic, then click on Create Alarm.