

Module 7: DynamoDB **Assignment**

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Course Offered: -Advanced Cloud Computing and Devops

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Date Of Submission: -06/11/2024

Problem Statement:

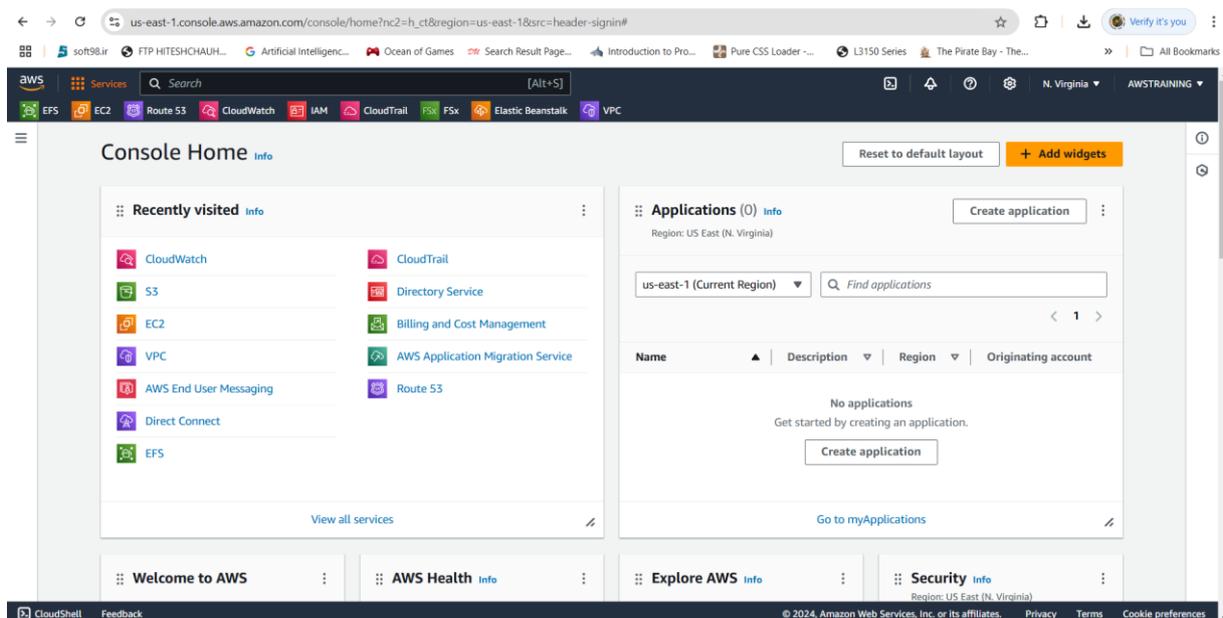
You work for XYZ Corporation. Their application requires a database service that can store data which can be retrieved if required. Implement a suitable service for the same.

While migrating, you are asked to perform the following tasks:

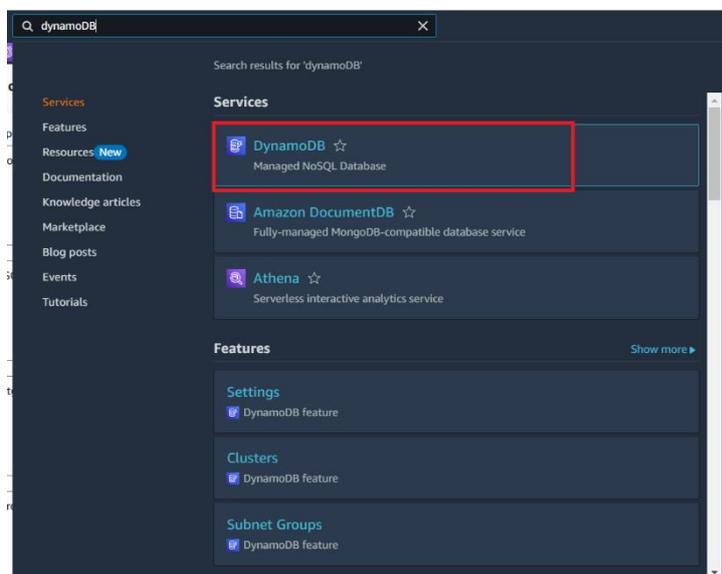
1. Create a DynamoDB table with partition key as ID.
2. Add 5 items to the DynamoDB table.
3. Take backup and delete the table.

ANSWER:

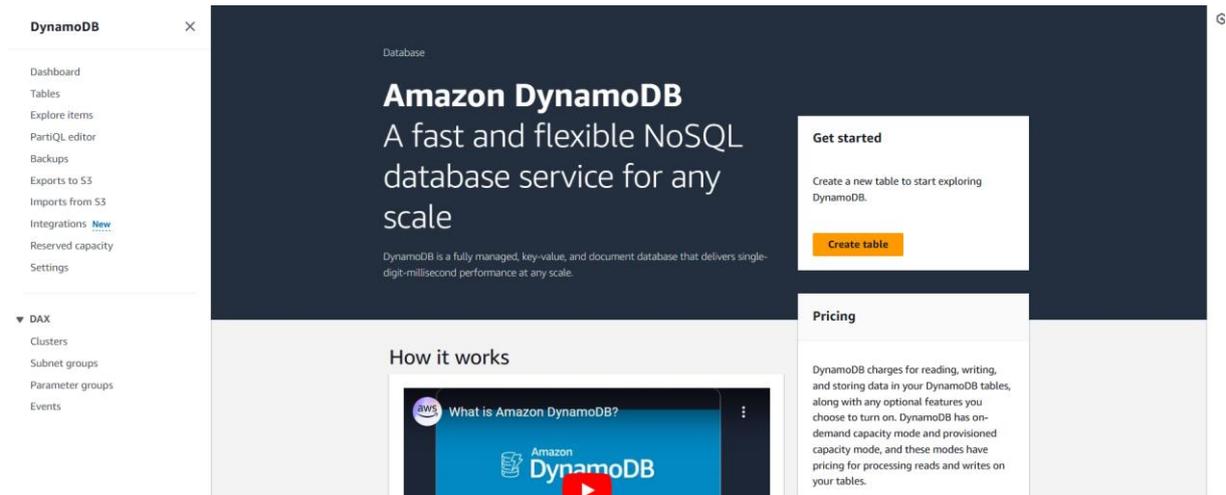
Login to AWS Management Console Then Search DynamoDB



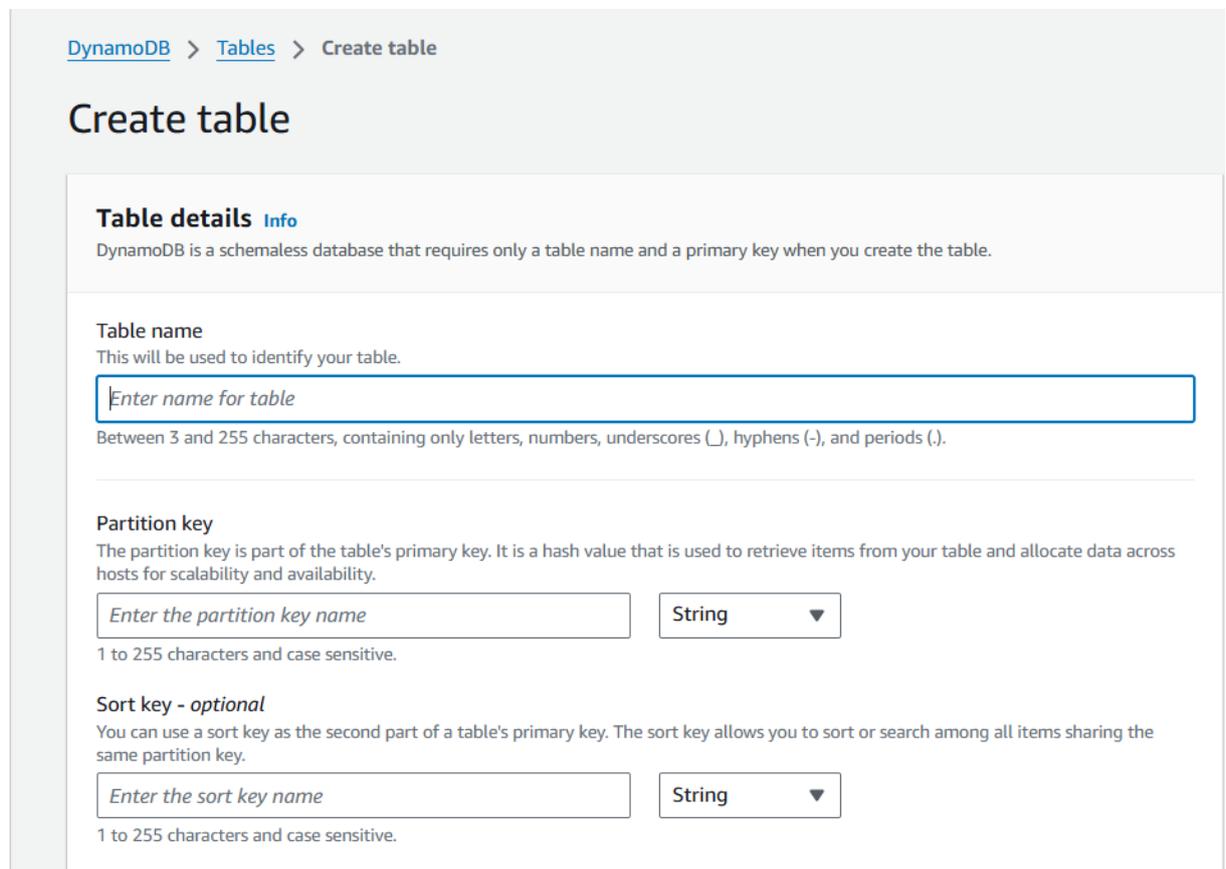
Click The DynamoDB



After Click The DynamoDB.You will see like this screen.



After Click The Create Table You will See like Filling to table details.



Now We need to create the dynamodb1 table in table details.

Partition key will be id

Table details [Info](#)

DynamoDB is a schemaless database that requires only a table name and a primary key when you create the table.

Table name

This will be used to identify your table.

Between 3 and 255 characters, containing only letters, numbers, underscores (`_`), hyphens (`-`), and periods (`.`).

Partition key

The partition key is part of the table's primary key. It is a hash value that is used to retrieve items from your table and allocate data across hosts for scalability and availability.

1 to 255 characters and case sensitive.

Sort key - *optional*

You can use a sort key as the second part of a table's primary key. The sort key allows you to sort or search among all items sharing the same partition key.

1 to 255 characters and case sensitive.

Provide the DynamoDB table name and partition key details

Default table settings

These are the default settings for your new table. You can change some of these settings after creating the table.

Setting	Value	Editable after creation
Table class	DynamoDB Standard	Yes
Capacity mode	Provisioned	Yes
Provisioned read capacity	5 RCU	Yes
Provisioned write capacity	5 WCU	Yes
Auto scaling	On	Yes
Local secondary indexes	-	No
Global secondary indexes	-	Yes
Encryption key management	Owned by Amazon DynamoDB	Yes
Deletion protection	Off	Yes
Resource-based policy	Not active	Yes

Tags

Tags are pairs of keys and optional values, that you can assign to AWS resources. You can use tags to control access to your resources or track your AWS spending.

No tags are associated with the resource.

[Add new tag](#)

You can add 50 more tags.

[Cancel](#)
Create table

Click "Create table"

Once the Table is created successfully.

Select the table > Actions > create an item

DynamoDB > Tables > dynamodb1

Tables (1) ×

Any tag key ▼

Any tag value ▼

1 match

< 1 > ⚙️

● dynamodb1 ☆

dynamodb1 ☆

Overview
Indexes
Monitor
Global tables
Backups
Exports and streams
Permissions
Additional >

General information Info

Partition key id (String)	Sort key -	Capacity mode Provisioned	Table status ✔ Active
Alarms ✔ No active alarms	Point-in-time recovery (PITR) Info ⊖ Off	Resource-based policy Info ⊖ Not active	

▶ Additional info

Items summary Get live item count

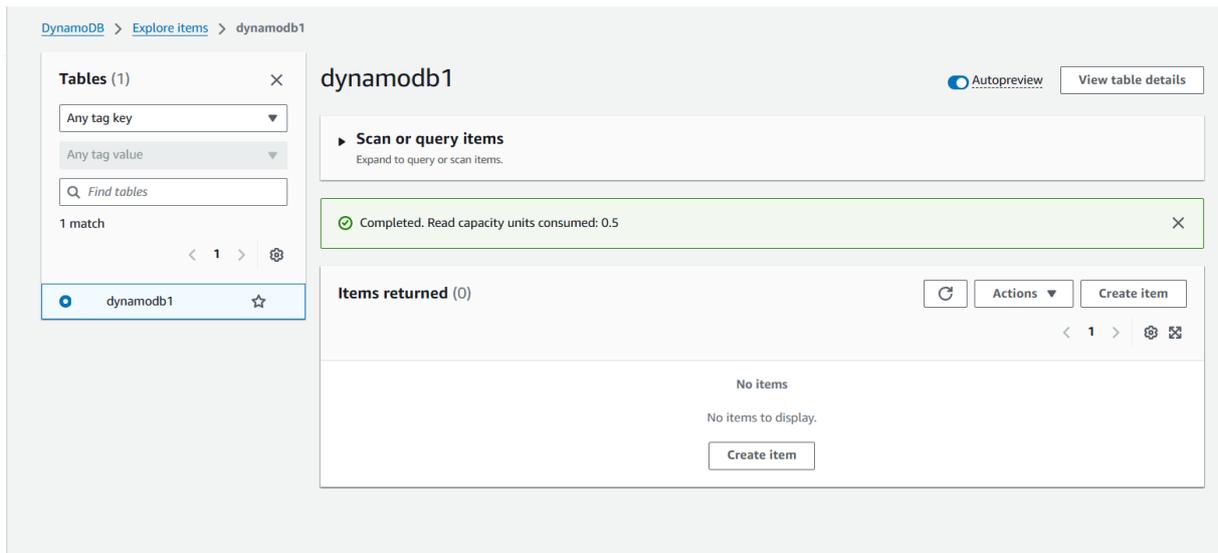
DynamoDB updates the following information approximately every six hours.

Item count 0	Table size 0 bytes	Average item size 0 bytes
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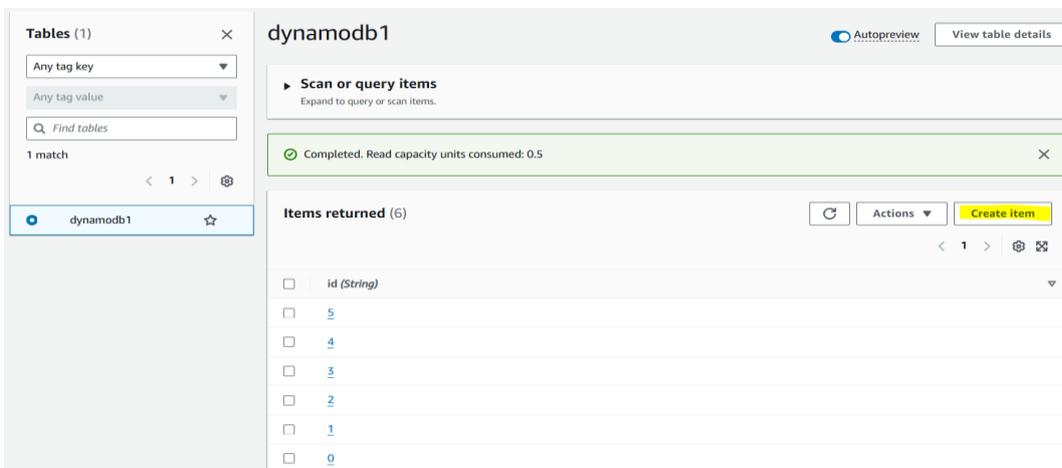
Click Explorer Item

The screenshot shows the AWS Management Console interface for DynamoDB. On the left is a navigation sidebar with options like Dashboard, Tables, Explore items, PartiQL editor, Backups, Exports to S3, Imports from S3, Integrations, Reserved capacity, Settings, DAX, Clusters, Subnet groups, Parameter groups, and Events. The main content area shows the 'Tables (1/1)' page for 'dynamodb1'. A table lists the table with columns for Name, Status, Partition key, Sort key, Indexes, Deletion protection, Favorite, Read capacity, and Total size. The 'dynamodb1' table is listed as 'Active' with a partition key of 'id (S)', sort key of '-', 0 indexes, and 0 bytes of total size. The 'Actions' dropdown menu is open, showing options like Update settings, Explore items, Add tag to selection, Remove tags from selection, Turn on deletion protection, and a highlighted 'Create item' button.

After Click The Explorer item Will be blank



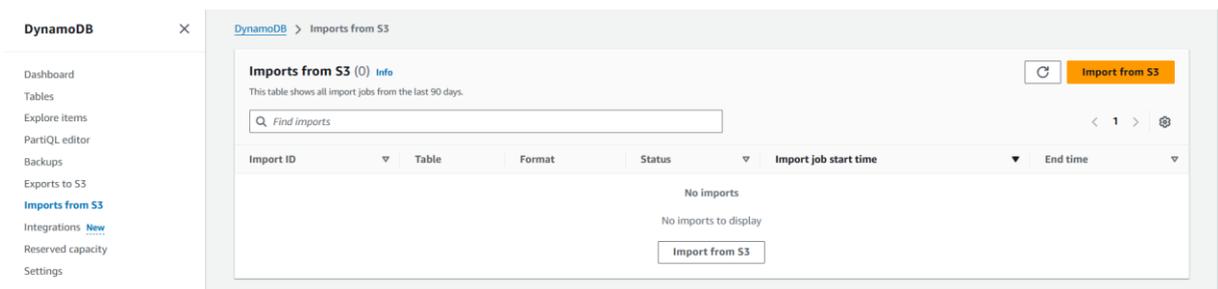
Then We need to create the item.in my case I have general the id like 0 to 5



You can see 6 Objects are Created successfully.

Now After Create the item We need to import

Import from S3 is also possible using the below method.



Import details [info](#)

Source S3 URL
Choose the Amazon S3 storage source to import from. You can specify a bucket or a path within the bucket.

Example formats: s3://countries or s3://countries/territories/

S3 bucket owner

This AWS account (183968932328)
 A different AWS account

Import file compression
Choose the compression type that matches your source S3 data.

No compression
 GZIP
 ZSTD

Import file format [info](#)
Choose the file format that matches your Amazon S3 storage source.

DynamoDB JSON Amazon Ion CSV

CSV header
Choose how headers are defined when you import a CSV file.

Use the first line of the source file
Auto-generate header values from the first line of the source file.

Your import of s3://dynamodbbackup to dynamodb is in progress.

DynamoDB > Imports from S3

Imports from S3 (1) [info](#)

This table shows all import jobs from the last 90 days.

Import ID	Table	Format	Status	Import job start time	End time
01730912281326-84fa791b	dynamodb	CSV	Importing	Nov 6, 2024, 22:28:01 (UTC+05:30)	-

Now Click **Import**

Creating DynamoDB Table Backup

Backups (0) [info](#)

[Schedule automatic backups](#) and [view backup job details](#) in [AWS Backup](#)

Name	Status	Creatio...	ARN	Size
<p>No backups</p> <p>Create a backup to save your data.</p> <input type="button" value="Create backup"/>				

Go to **DynamoDB Table** > Backups > Create Backup

Create on-demand backup

Create a one-time snapshot backup of your table. Schedule automatic backups of your table in [AWS Backup](#)

Source table Info

Source table
dynotable1 

Backup settings Info
A backup name will be created automatically.

Default settings
Create a backup that stays in warm storage.

Customize settings
Create a backup that can transition to cold storage and be deleted as it ages.

Backup window Start in 1 hour	Backup management AWS Backup	Transition to cold storage Never
Retention period Always	Backup vault Default	IAM Role AWSBackupDefaultServiceRole

Tags - optional
AWS Backup copies tags from the DynamoDB table to the recovery point upon creation. You can specify additional tags to add to the recovery point.

No tags are associated with the resource.

You can add 50 more tags.

That will create the table backup.

DynamoDB > Tables

Tables (1/1) Info

Find tables by table name Any tag key Any tag value

<input checked="" type="checkbox"/>	Name	Status	Partition key	Sort key	Indexes	Deletion protection	Read capacity mode	Write capacity mode	Total size	Table class
<input checked="" type="checkbox"/>	dynotable1	Active	id (N)	-	0	Off	Provisioned with auto scaling (1)	Provisioned with auto scaling (1)	0 bytes	Standard

Delete table



Delete table **dynotable1** in **Asia Pacific (Mumbai)** permanently? This action cannot be undone.

 Proceeding with this action will delete the table and you won't be able to retrieve this data.

Delete all CloudWatch alarms for **dynotable1**.

Create an on-demand backup of **dynotable1** before deletion.

You can create an on-demand backup of your table for long-term retention and data archiving.

You can then use this backup to restore your data to its exact state before table deletion.

Additional charges apply for on-demand backup and restore. For more information see [Pricing](#) .

To avoid unintentional deletions, we ask you to provide additional confirmation.

To confirm this deletion, type "confirm".

Cancel

Delete

 The request to delete the "dynotable1" table has been submitted successfully.