DynamoDB

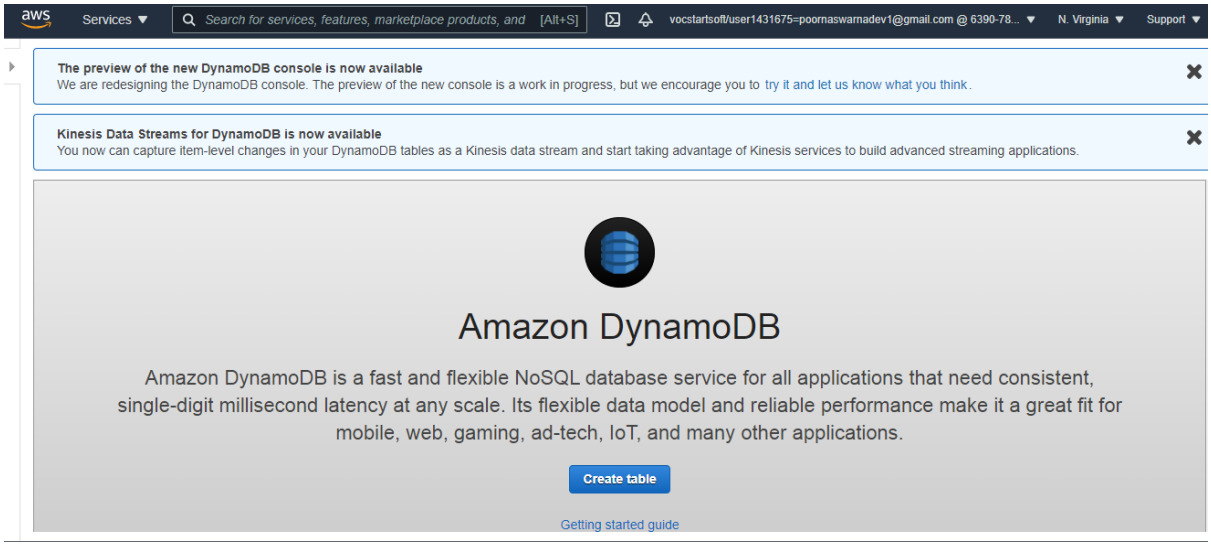
In this example, you create a CollegeStaff table in Amazon DynamoDB.

You will also know to perform insert,update,delete operations on DynamoDB and export the data to S3 in JSON format.

This table, has the following details.

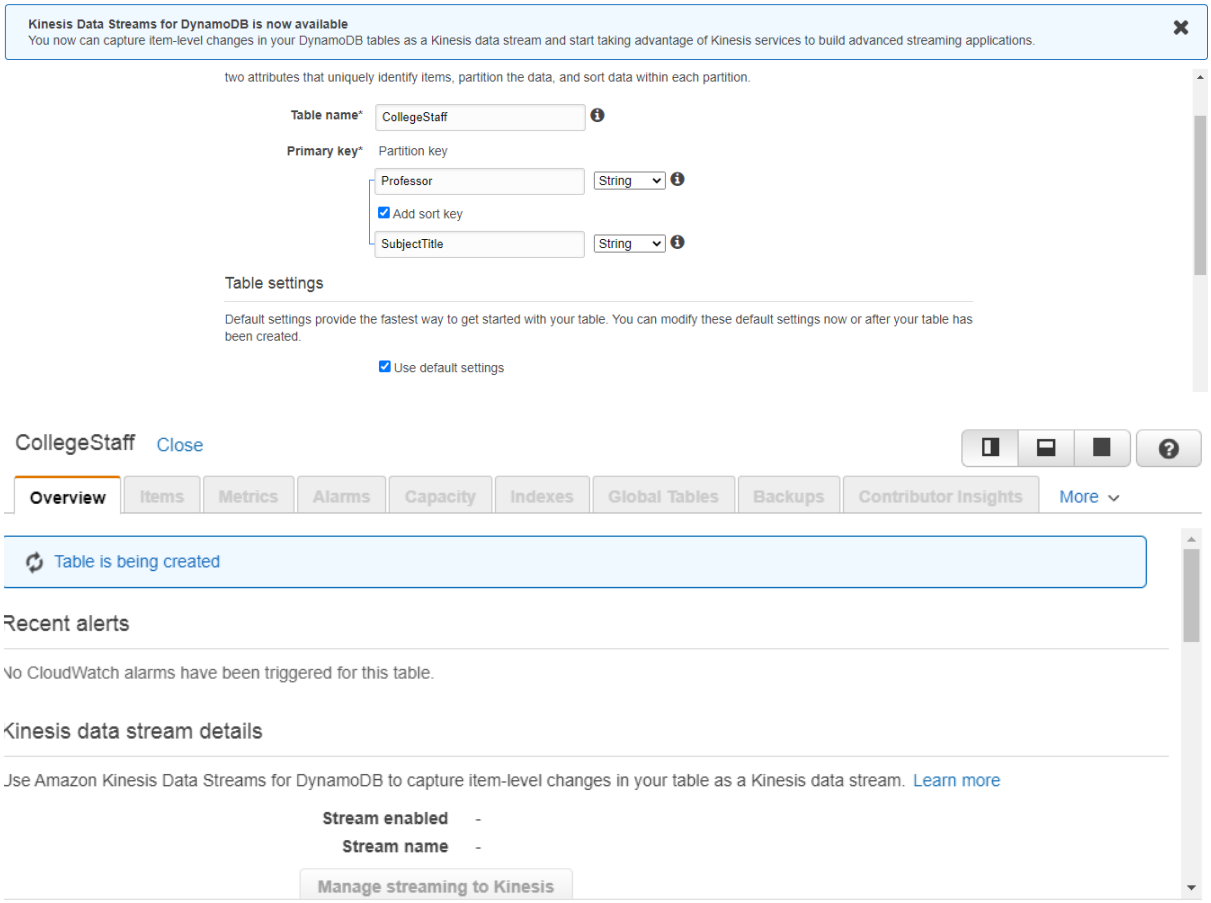
- Partition key – Professor
- Sort key – subjectTitle

Create a DynamoDB database



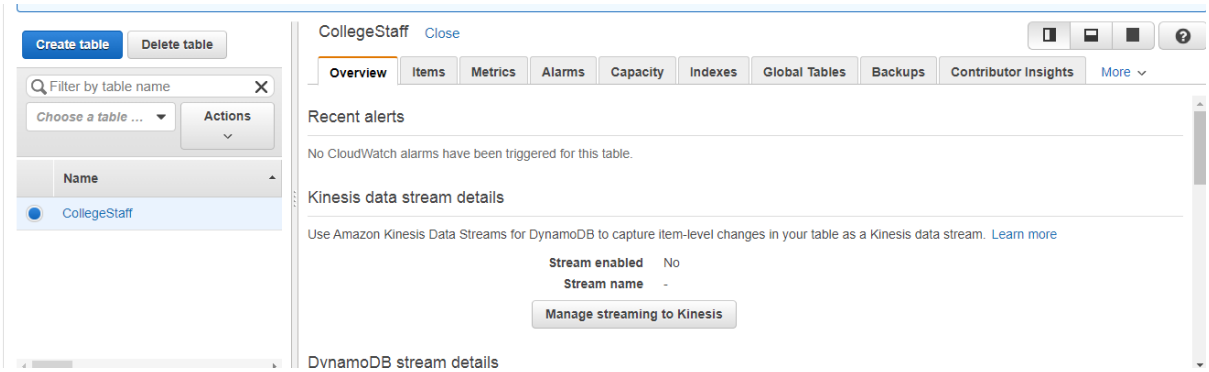
Enter the table details as follows:

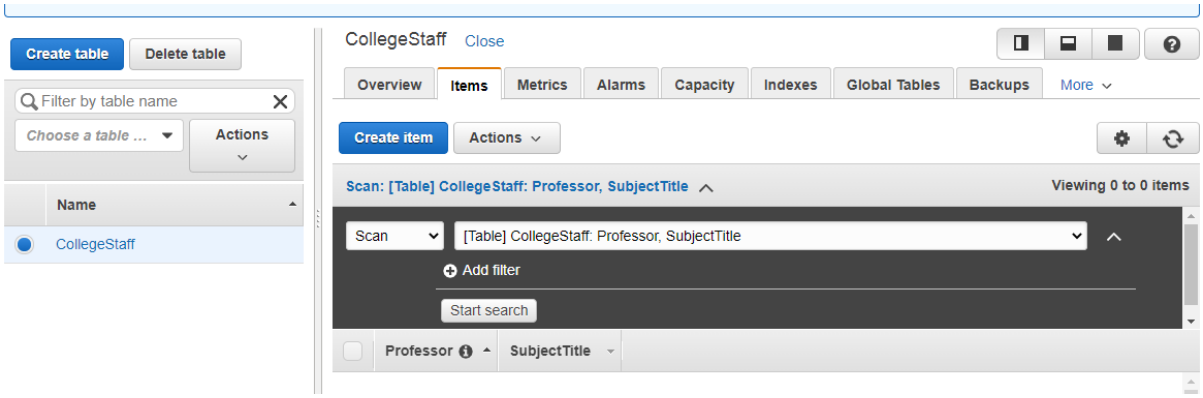
a. For the table name, enter `CollegeStaff`
b. For the partition key, enter `Professors`.
c. Choose **Add sort key**.
d. Enter `SubjectTitle` as the sort key.

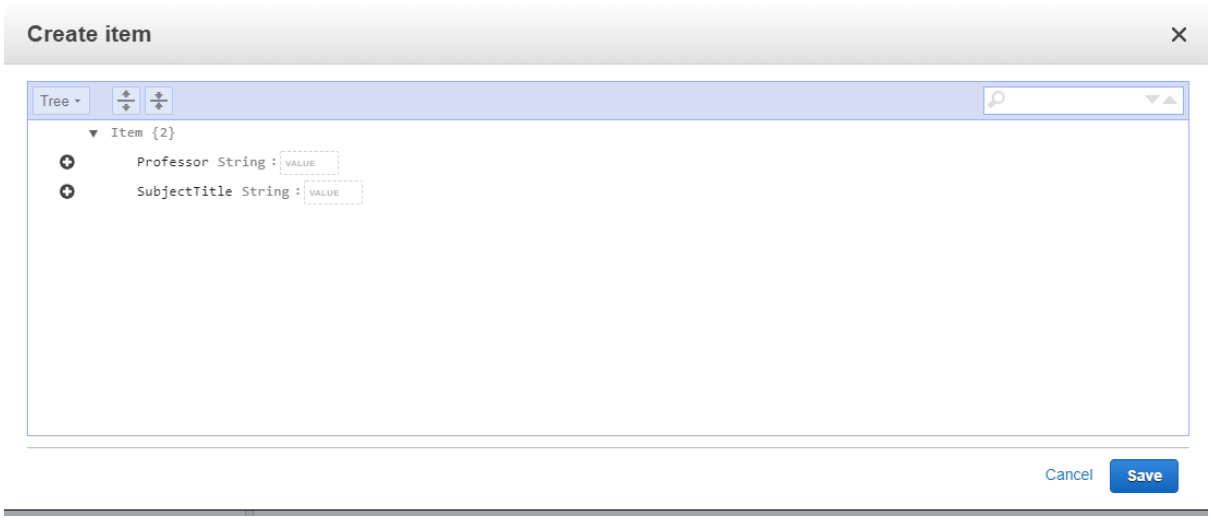


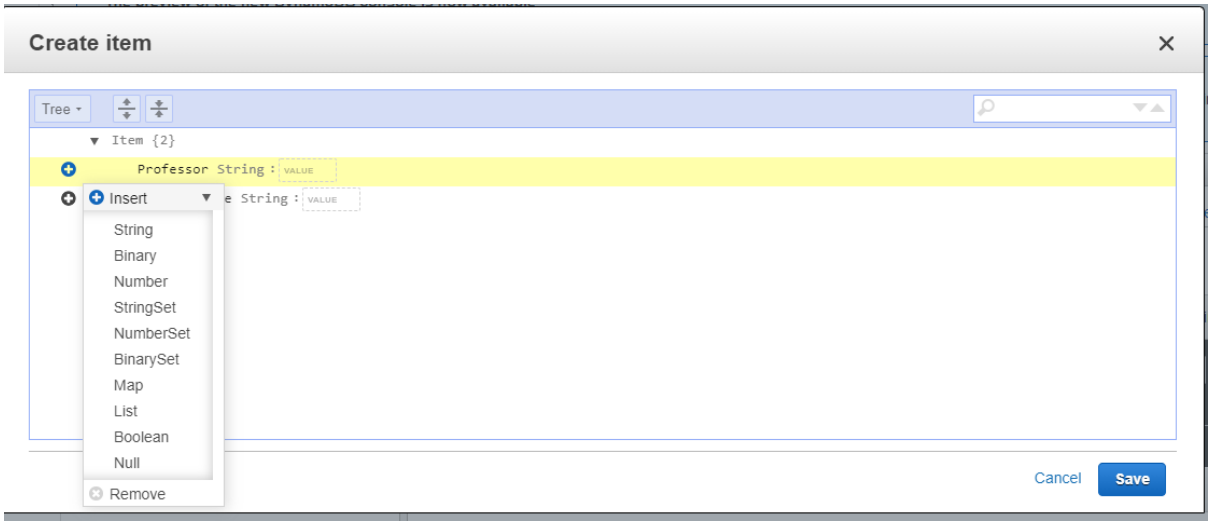
Write Data to the Table CollegeStaff

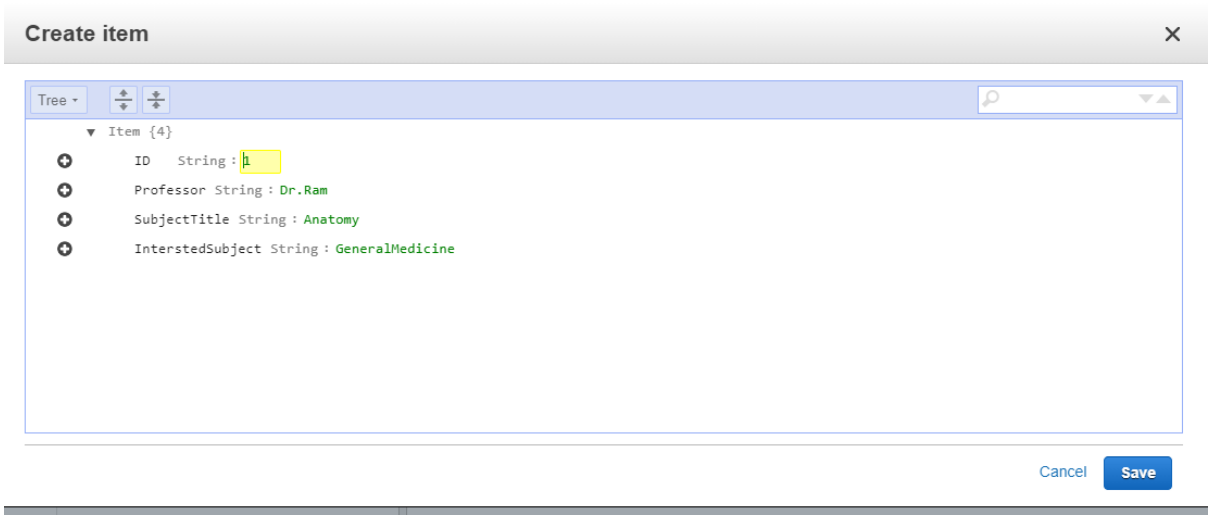
1. Open the DynamoDB console at https://console.aws.amazon.com/dynamodb/.
2. In the navigation pane on the left side of the console, choose **Tables**.
3. In the table list, choose the **CollegeStaff** table.
4. Choose the **Items** tab for the **CollegeStaff** table.
5. On the **Items** tab, choose **Create item**.

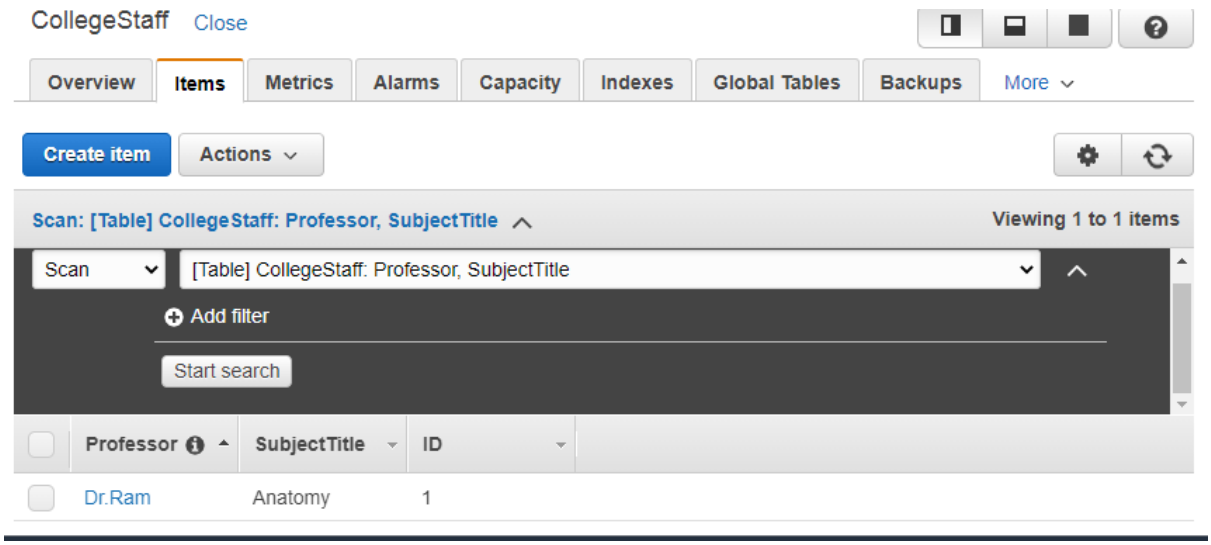


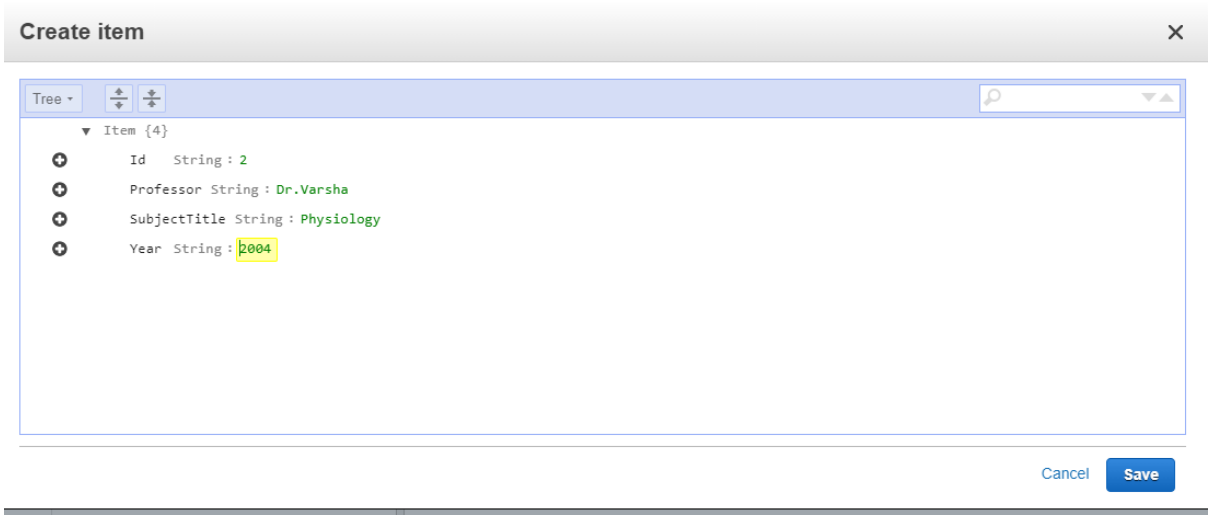

Create table
Delete table
Filter by table name
Choose a table ...
Actions
Name
CollegeStaff
CollegeStaff
Close
Overview
Items
Metrics
Alarms
Capacity
Indexes
Global Tables
Backups
More
Create item
Actions
Scan: [Table] CollegeStaff: Professor, SubjectTitle
Viewing 0 to 0 items
Scan
[Table] CollegeStaff: Professor, SubjectTitle
Add filter
Start search
Professor
SubjectTitle

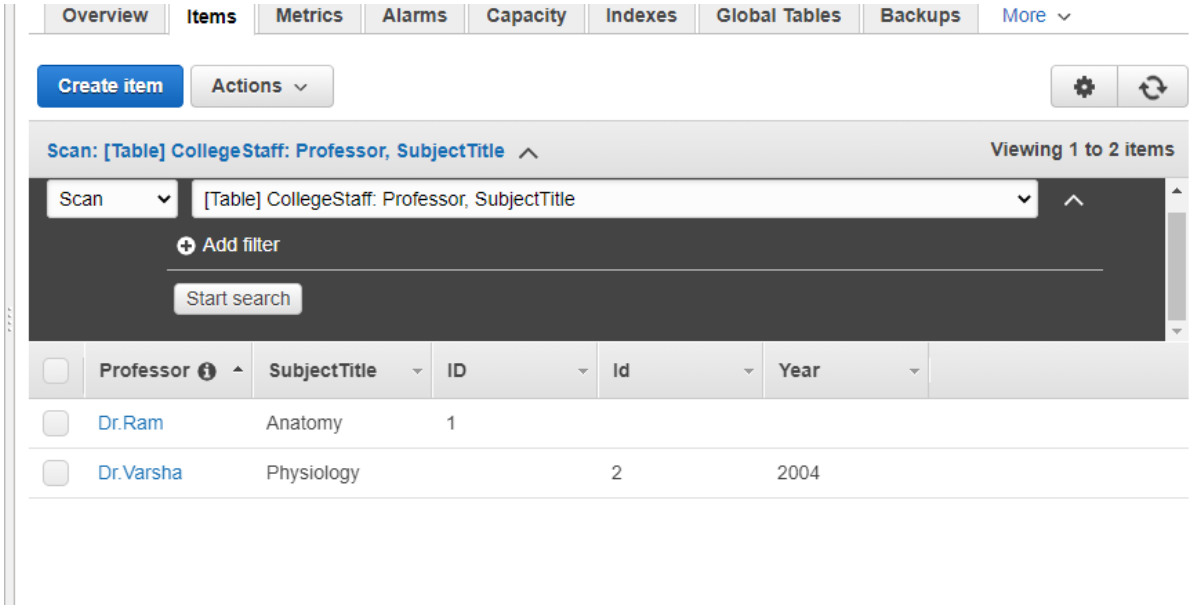

Create item
Tree
Item {2}
Professor String : VALUE
SubjectTitle String : VALUE
Cancel
Save

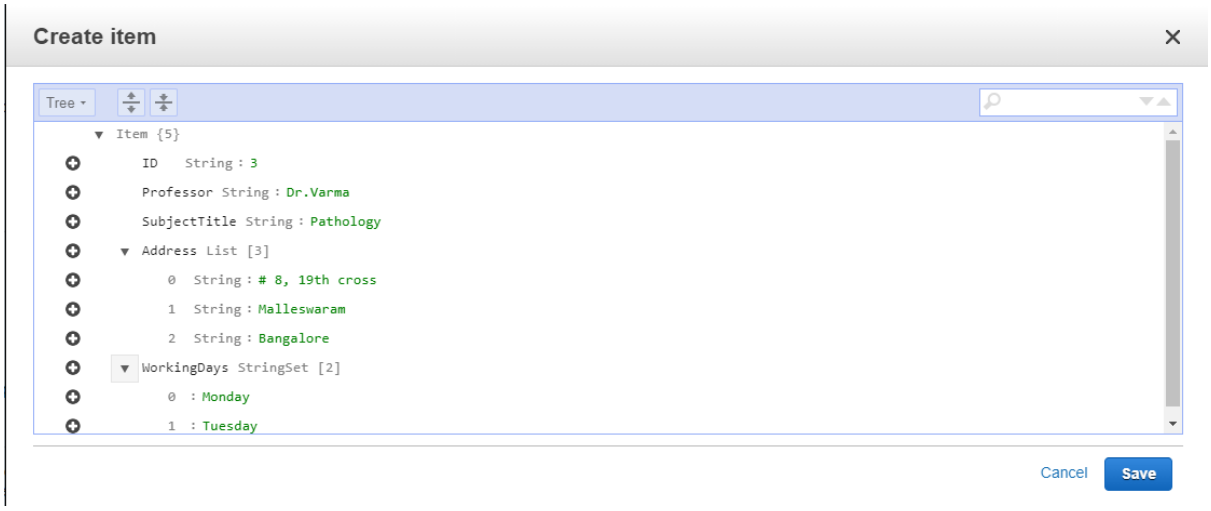

Create item
Tree
Item {2}
Professor String : VALUE
Insert
String
Binary
Number
StringSet
NumberSet
BinarySet
Map
List
Boolean
Null
Remove
Cancel
Save


Create item
Tree
Item {4}
ID String : 1
Professor String : Dr.Ram
SubjectTitle String : Anatomy
InterstedSubject String : GeneralMedicine
Cancel
Save


CollegeStaff
Close
Overview
Items
Metrics
Alarms
Capacity
Indexes
Global Tables
Backups
More
Create item
Actions
Scan: [Table] CollegeStaff: Professor, SubjectTitle
Viewing 1 to 1 items
Scan
[Table] CollegeStaff: Professor, SubjectTitle
Add filter
Start search
Professor
SubjectTitle
ID
Dr.Ram
Anatomy
1

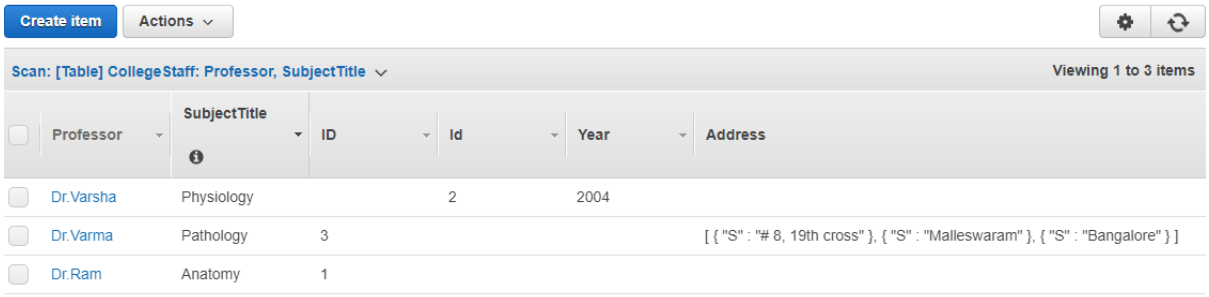

Create item
Tree
Item {4}
Id String : 2
Professor String : Dr.Varsha
SubjectTitle String : Physiology
Year String : 2004
Cancel
Save





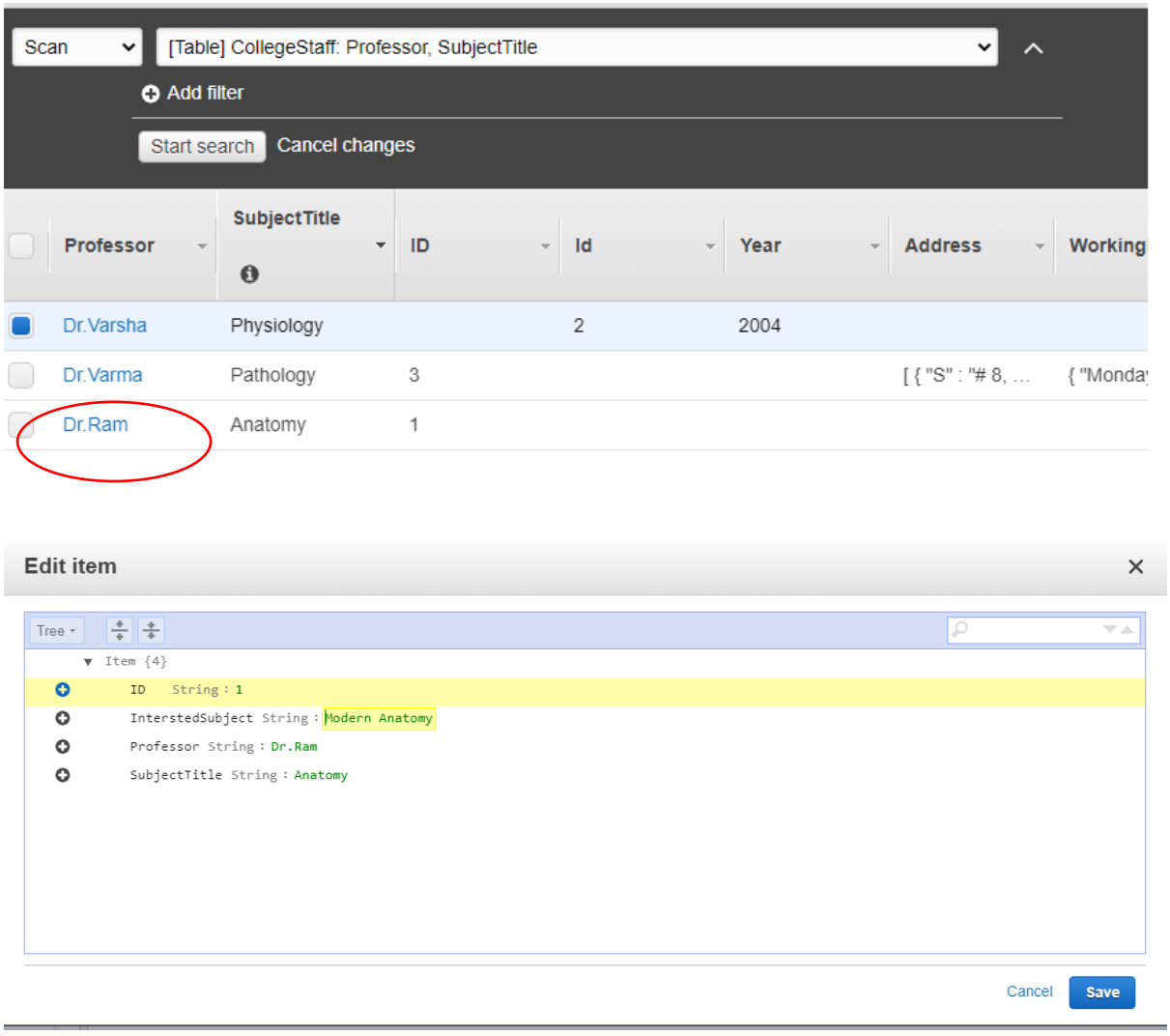
Read Data from DynamoDB

1. In the navigation pane on the left side of the console, choose **Tables**.
2. Choose the **CollegeStaff** table from the table list.
3. Choose the **Items** tab for the **CollegeStaff** table.
4. On the **Items** tab, view the list of items stored in the table, sorted by `“Professor”` and “SubjectTitle”



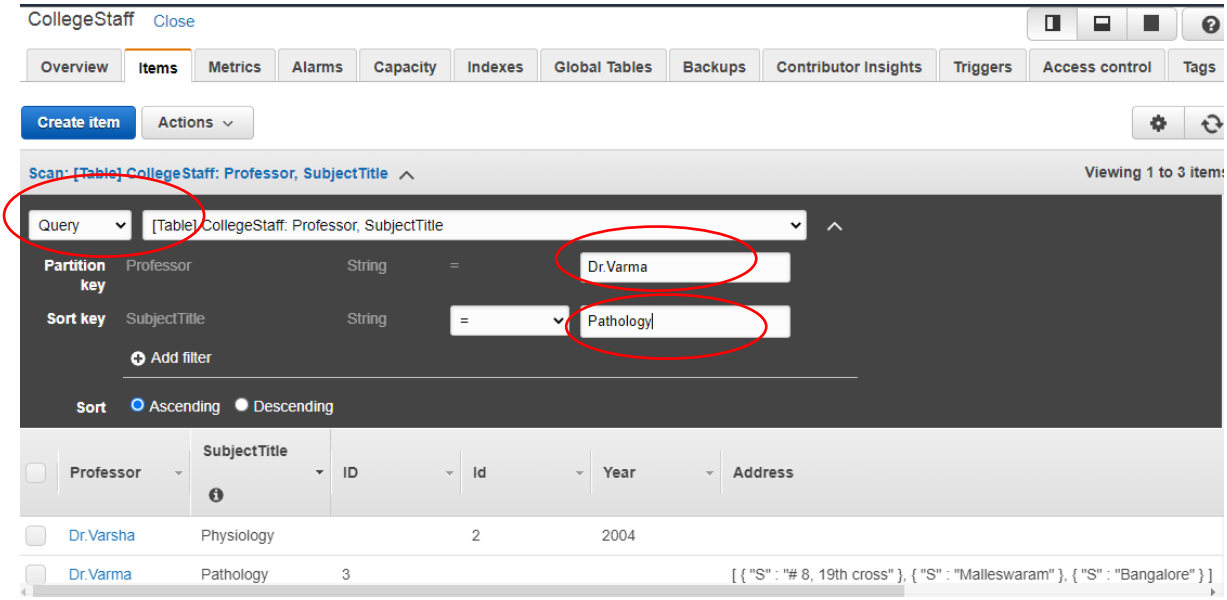
Step 4: Update Data

1. In the navigation pane on the left side of the console, choose **Tables**.
2. Choose the **CollegeStaff** table from the table list.
3. Choose the **Items** tab for the **`CollegeStaff`** table.
4. Choose the item whose **Professor** value is **Dr.Ram** and **`SubjectTitle`** value is **"Anatomy"**
5. Update the **InterestedSubject** value to **Modern Anatomy**, and then choose **Save**.

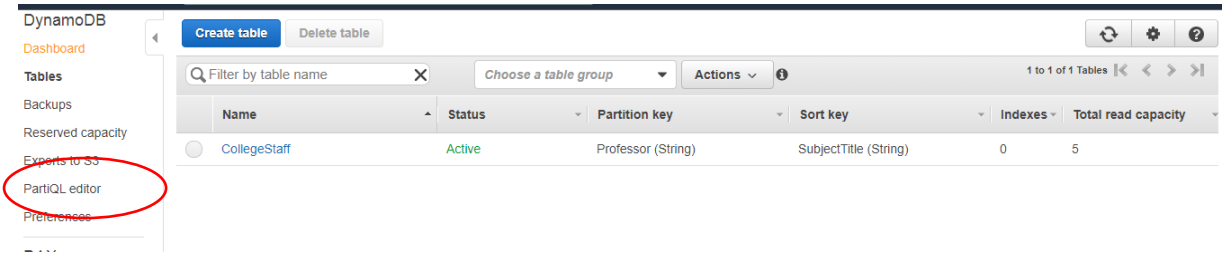


Step 5: Query Data

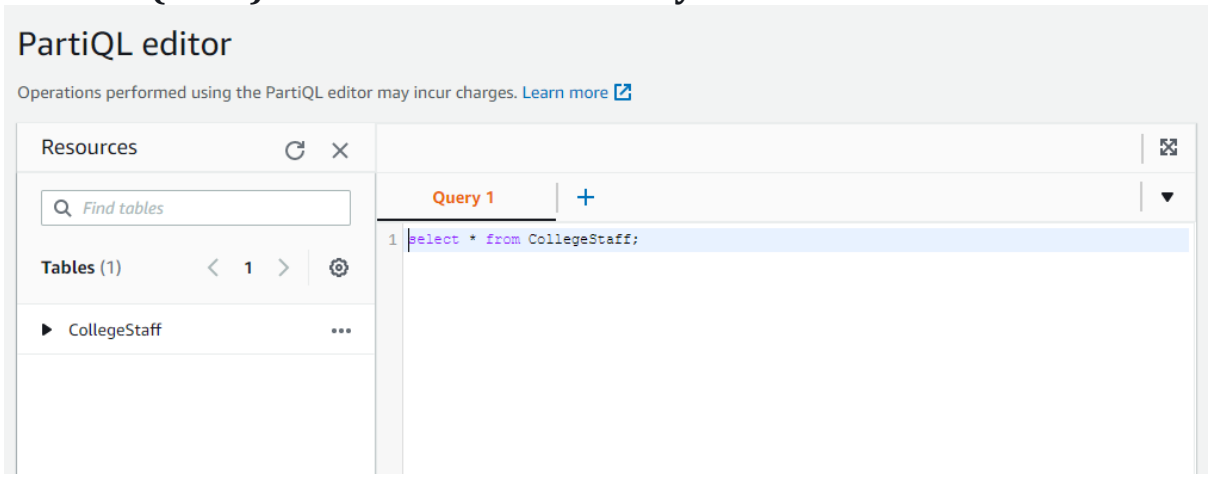
1. In the navigation pane on the left side of the console, choose **Tables**.
2. Choose the **CollegeStaff** table from the table list.
3. Choose the **Items** tab for the **CollegeStaff** table.
4. In the drop-down list, choose **Query**.



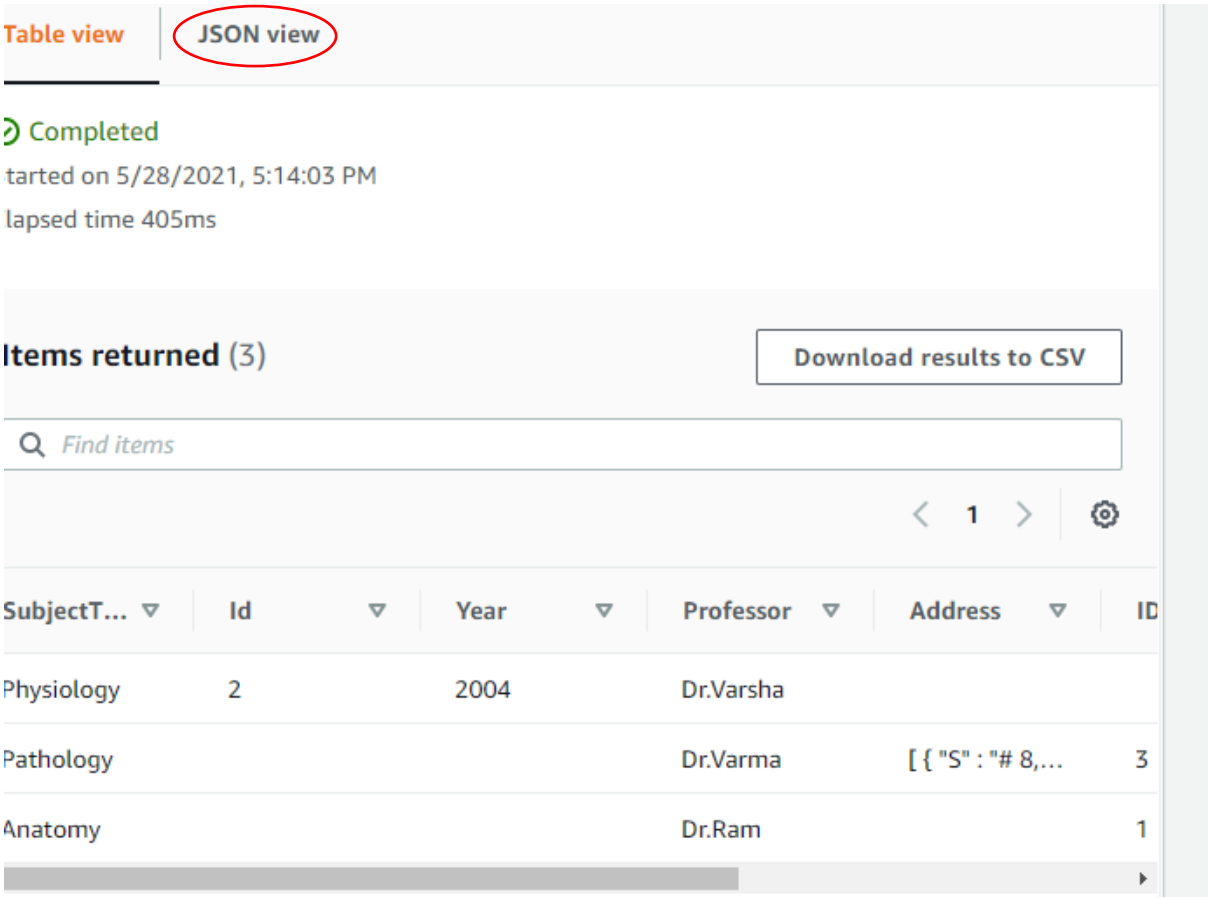
Lets visit partiQ editor for DynamoDB



ENABLE (PITR)- Point-in-Time Recovery.



RUN and check the output

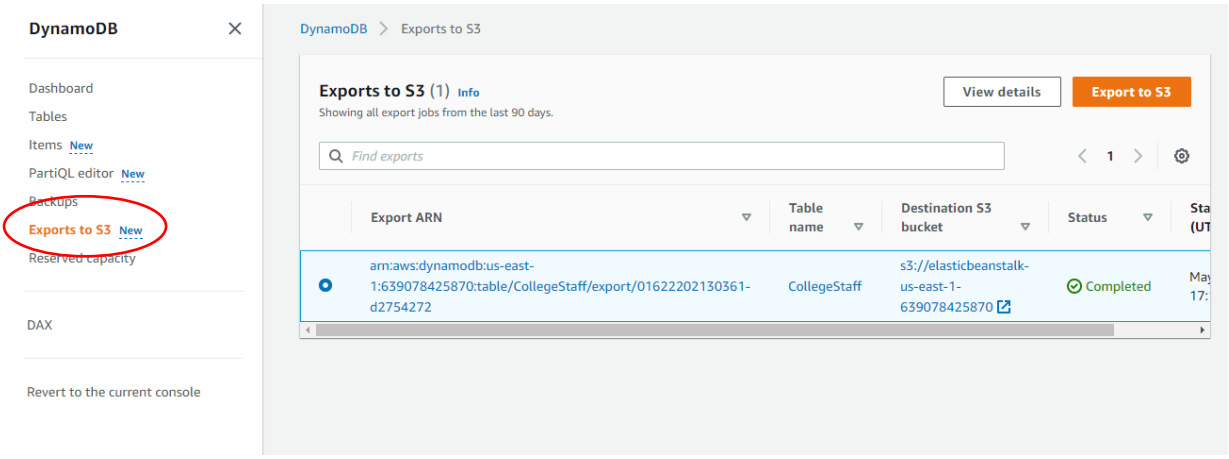


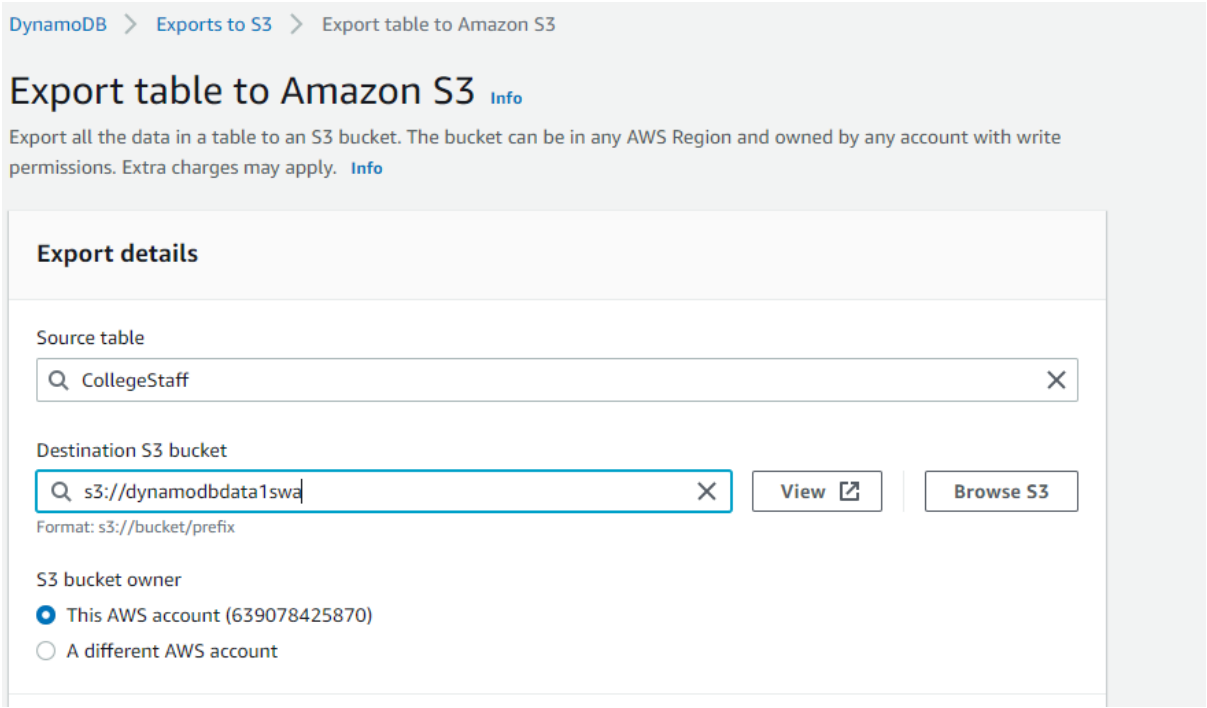
Click on JSON view to see the JSON form of output

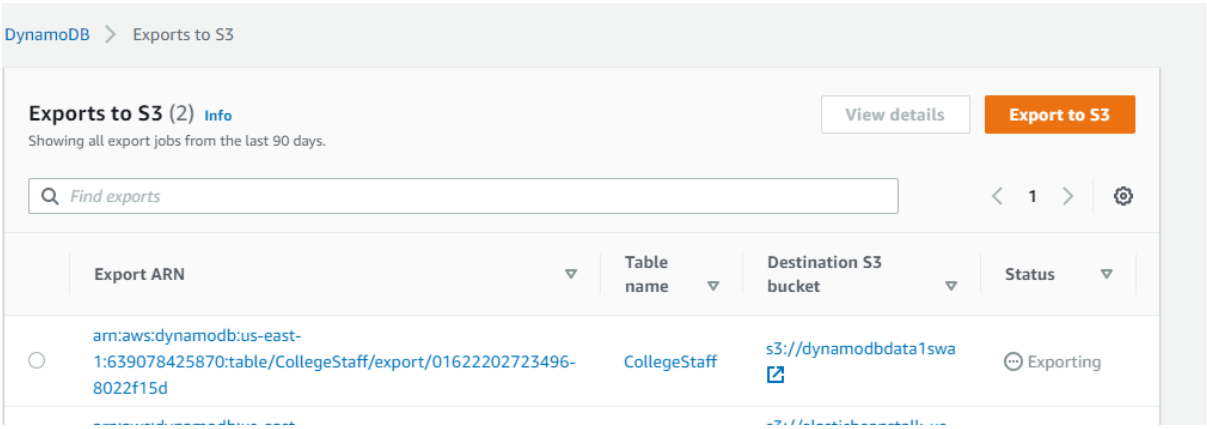
Table view | JSON view


```
"Items" : [ 3 items
  0 : { 4 items
    "SubjectTitle" : { 1 item
      "S" : "Physiology"
    }
    "Id" : { 1 item
      "S" : "2"
    }
    "Year" : { 1 item
      "S" : "2004"
    }
    "Professor" : { 1 item
      "S" : "Dr.Varsha"
    }
  }
  1 : { 5 items
    "Address" : { 1 item
      "L" : [ 3 items
        0 : { 1 item
          "S" : "# 8, 19th cross"
        }
```


Export the dataoutput to S3

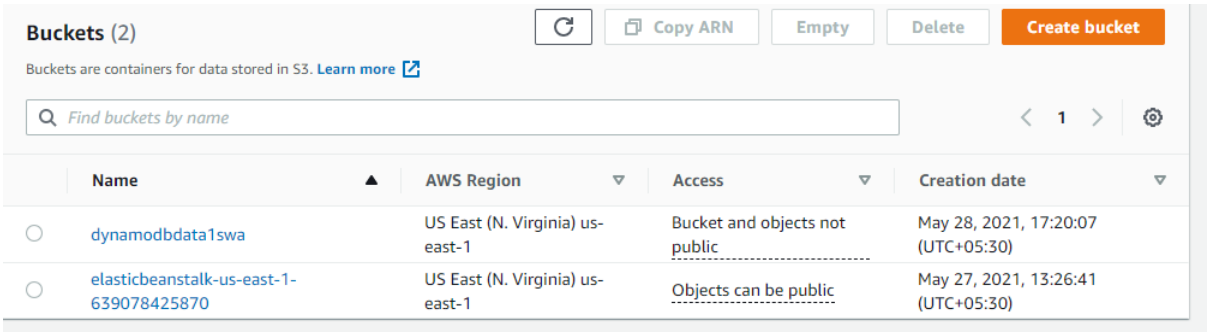

DynamoDB
Dashboard
Tables
Items New
PartiQL editor New
Backups
Exports to S3 New
Reserved capacity
DAX
Revert to the current console
DynamoDB > Exports to S3
Exports to S3 (1) Info
Showing all export jobs from the last 90 days.
View details
Export to S3
Find exports
1
Export ARN
Table name
Destination S3 bucket
Status
arn:aws:dynamodb:us-east-1:639078425870:table/CollegeStaff/export/01622202130361-d2754272
CollegeStaff
s3://elasticbeanstalk-us-east-1-639078425870
Completed

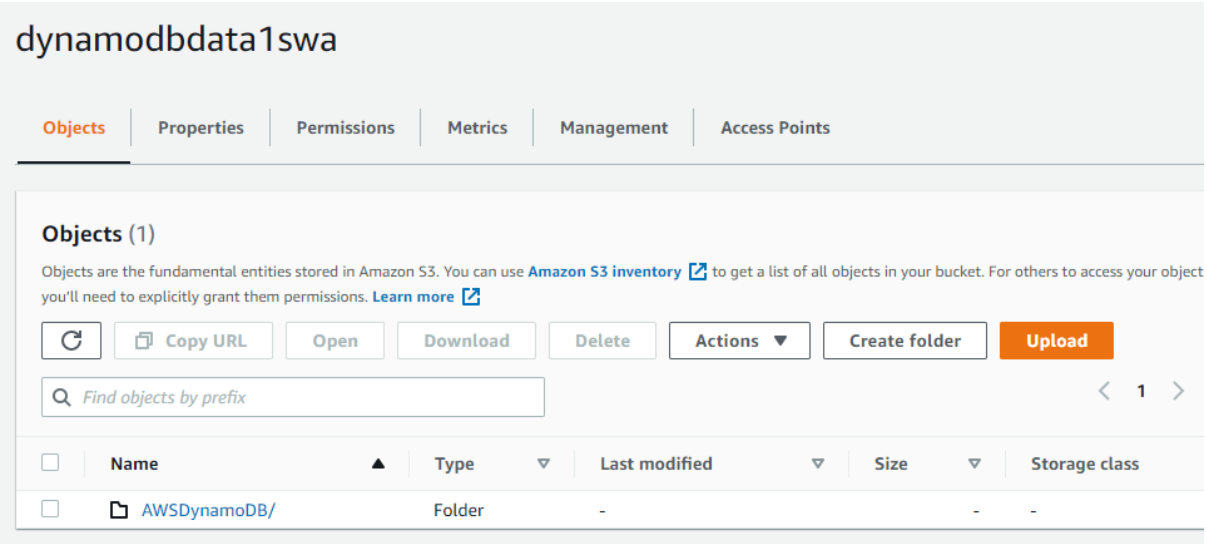

DynamoDB > Exports to S3 > Export table to Amazon S3
Export table to Amazon S3 Info
Export all the data in a table to an S3 bucket. The bucket can be in any AWS Region and owned by any account with write permissions. Extra charges may apply. Info
Export details
Source table
CollegeStaff
Destination S3 bucket
s3://dynamodbdata1swa
View
Browse S3
Format: s3://bucket/prefix
S3 bucket owner
This AWS account (639078425870)
A different AWS account

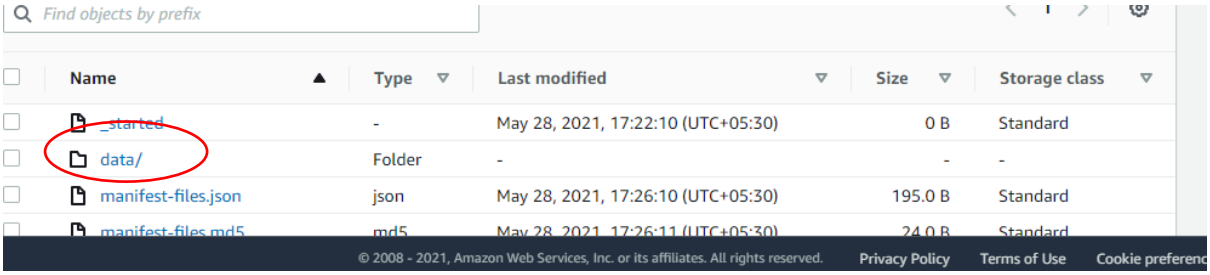

DynamoDB > Exports to S3
Exports to S3 (2) Info
Showing all export jobs from the last 90 days.
View details
Export to S3
Find exports
1
Export ARN
Table name
Destination S3 bucket
Status
arn:aws:dynamodb:us-east-1:639078425870:table/CollegeStaff/export/01622202723496-8022f15d
CollegeStaff
s3://dynamodbdata1swa
Exporting

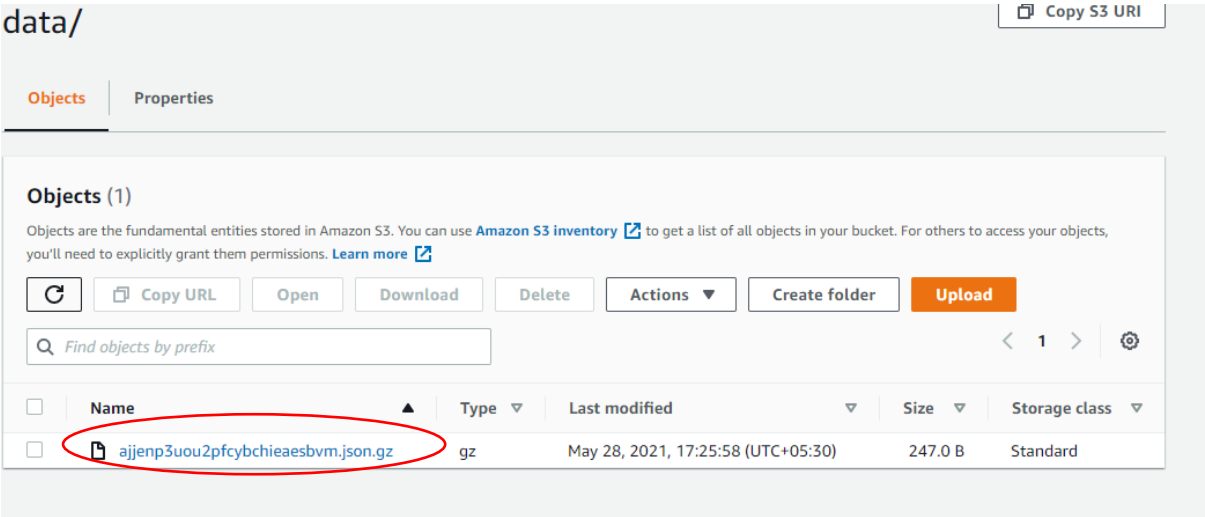
Wait till the status changes to completed.

Select uploaded bucket from S3







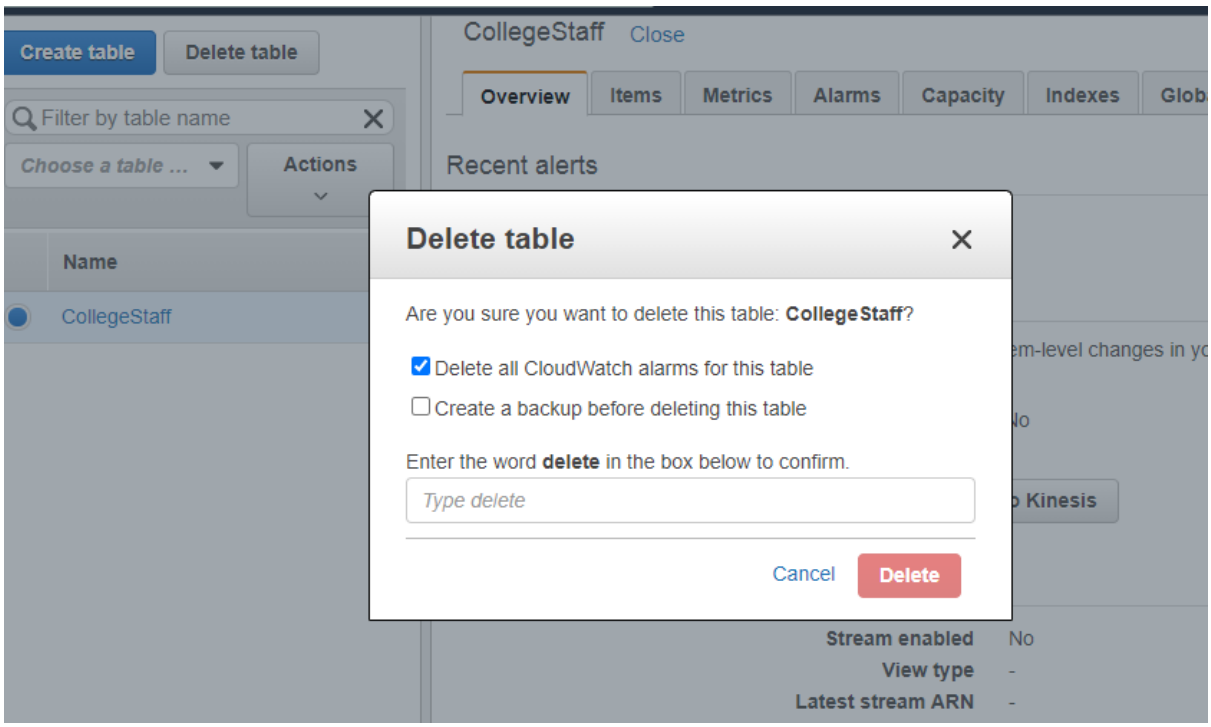


Go Inside all the sub folders and See the file is uploaded in JSON format in S3.

Clean-Up

Goto DynamoDB Table View

Select CollegeStaff and delete the table.



Empty and Delete S3 Bucket.

Happy Learning!!!!!