

Lesson 03 Demo 02

Performing Read Operation

Objective: To perform the read operation for querying a collection of documents in MongoDB

Tools required: MongoDB Compass

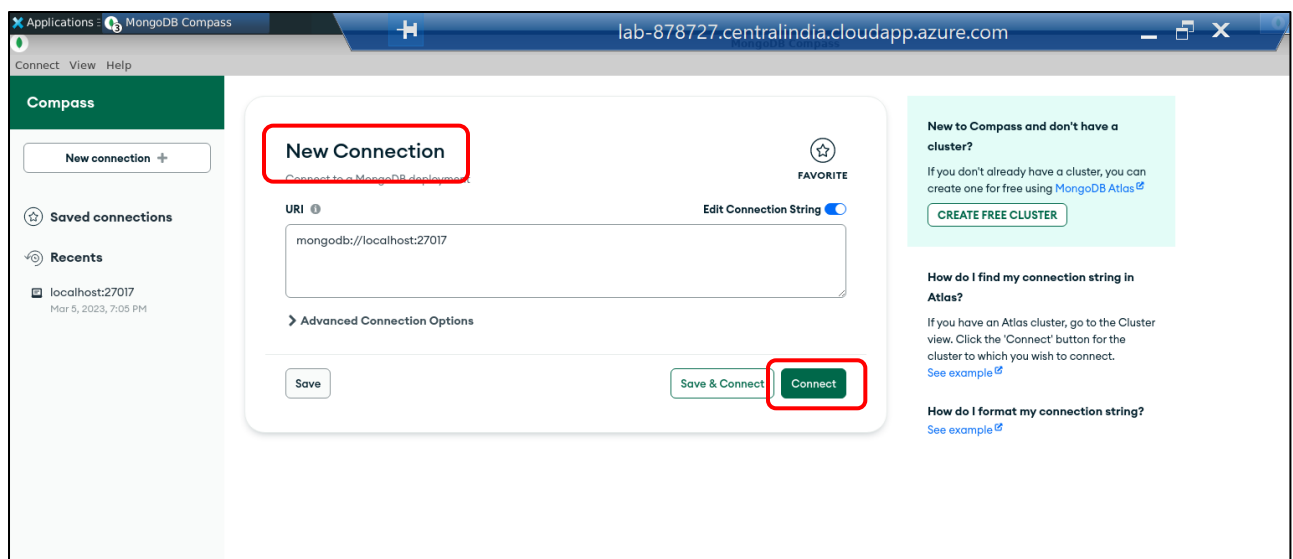
Prerequisites: Knowledge of JavaScript and SQL

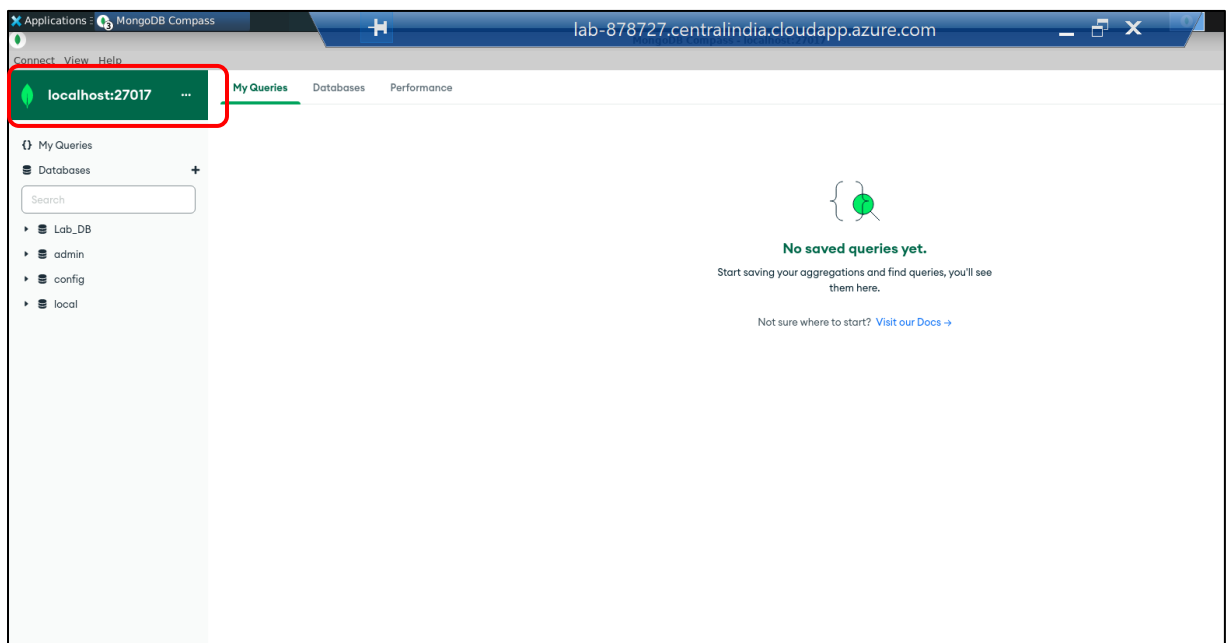
Steps to be followed:

1. Connect to MongoDB compass by using the virtual machine extension
2. Create a database in MongoDB compass
3. Create a collection in the database
4. Perform the read operation

Step 1: Connect to MongoDB Compass by using the virtual machine extension

- 1.1 To create a new connection in MongoDB Compass, enter **mongodb://localhost:27017** in the URL box, then click the **Connect** button

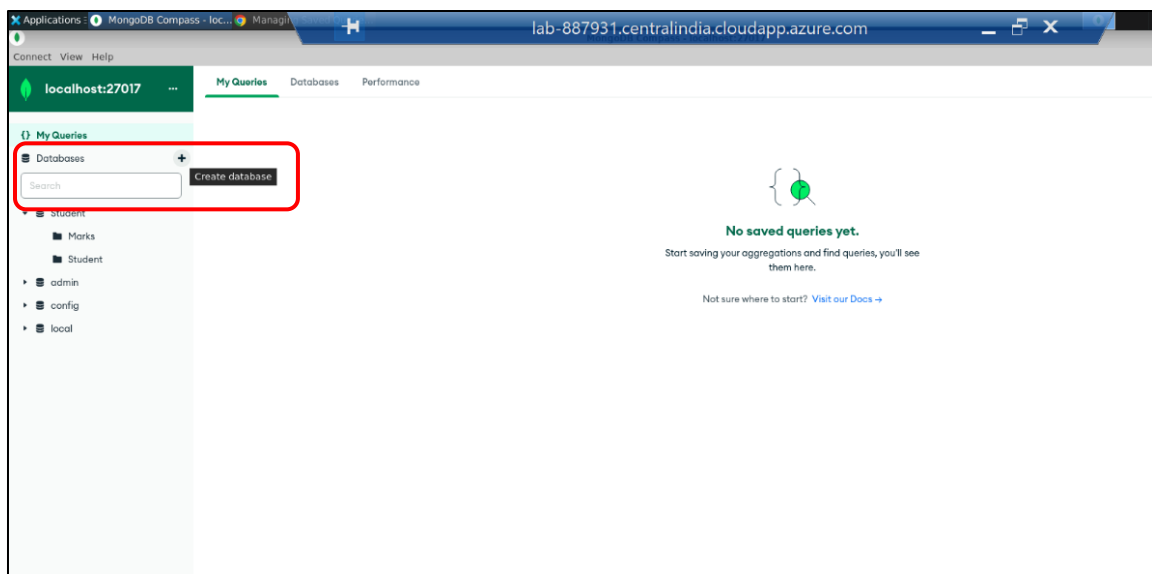




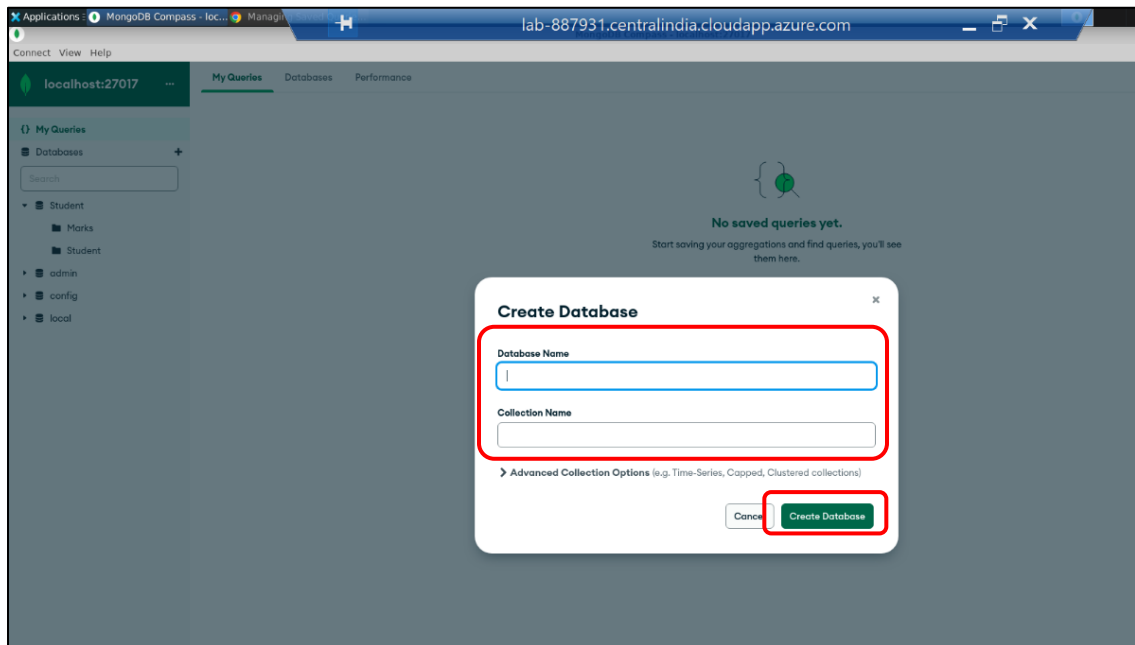
The connection has been established to the local host in MongoDB Compass.

Step 2: Create a database in MongoDB Compass

2.1 To create a database, click on **Databases**



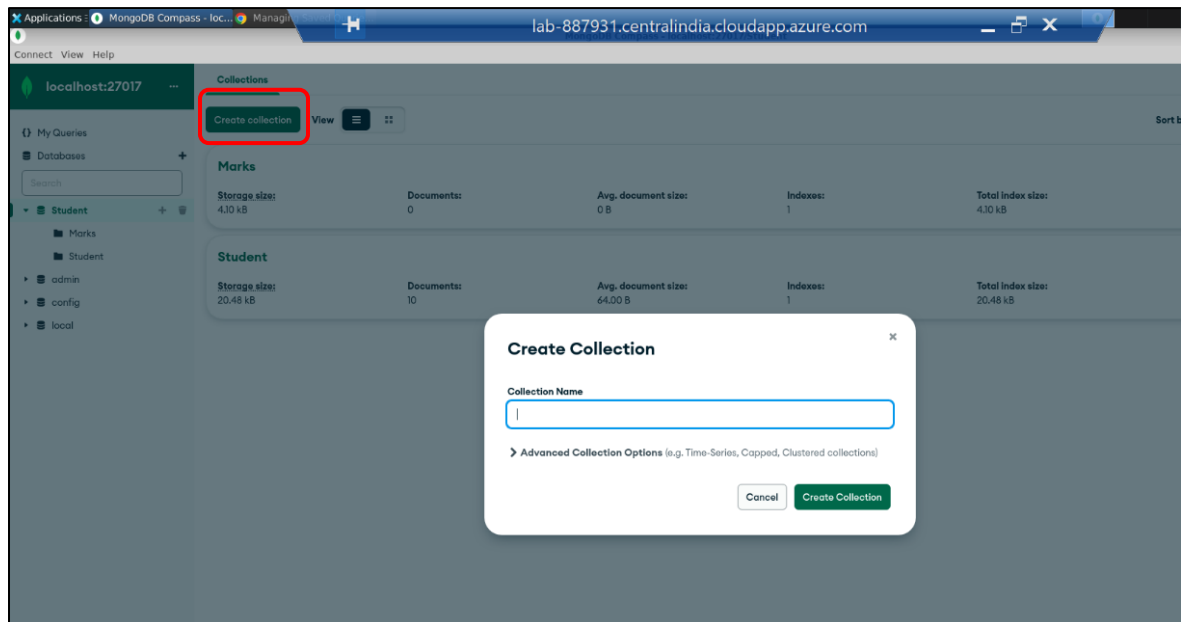
2.2 Enter the **Database Name** and the **Collection Name**, then click on **Create Database**



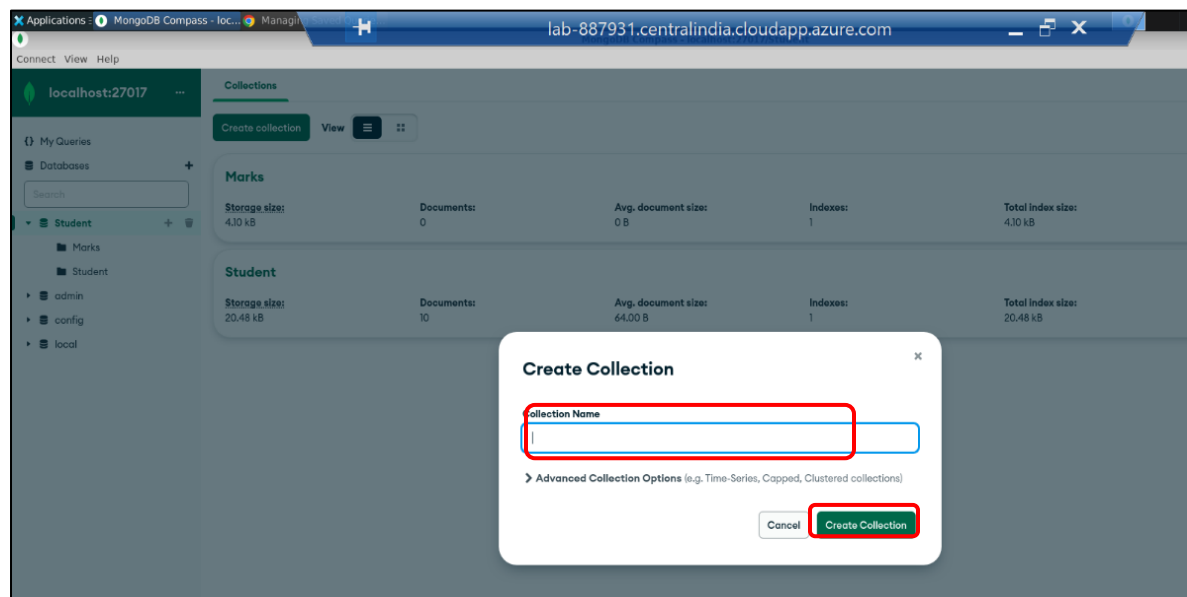
The database is created.

Step 3: Create a collection in the database

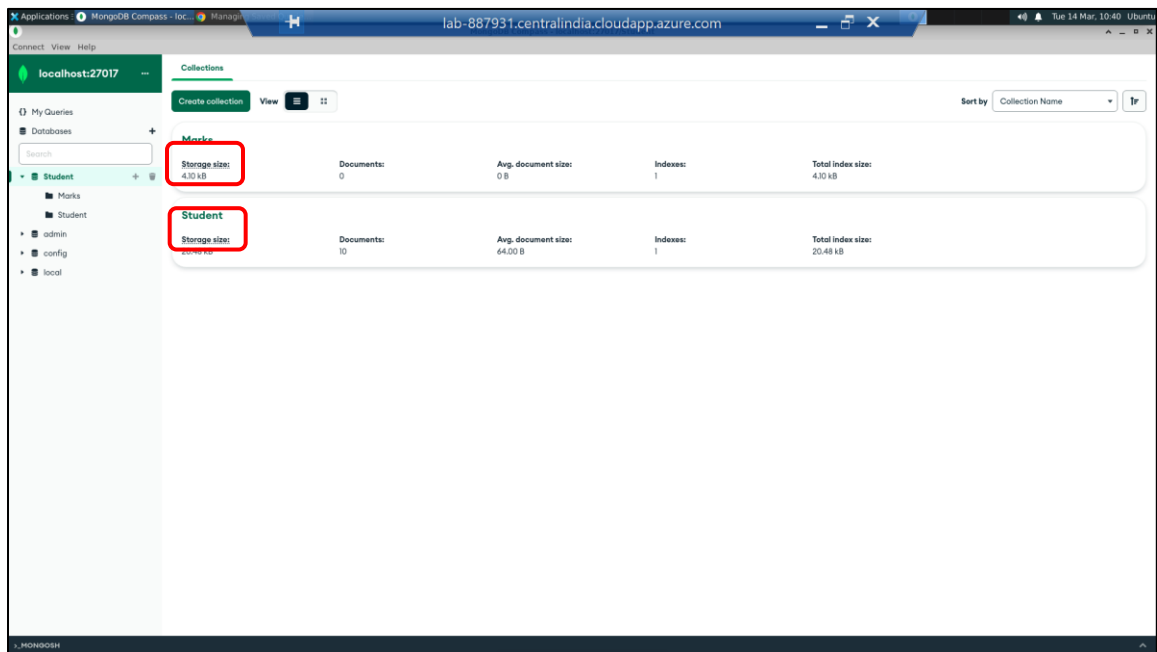
3.1 To create a collection, click on the pane tab of **Create Collection**



3.2 Enter the **Collection Name** and click the **Create collection** button

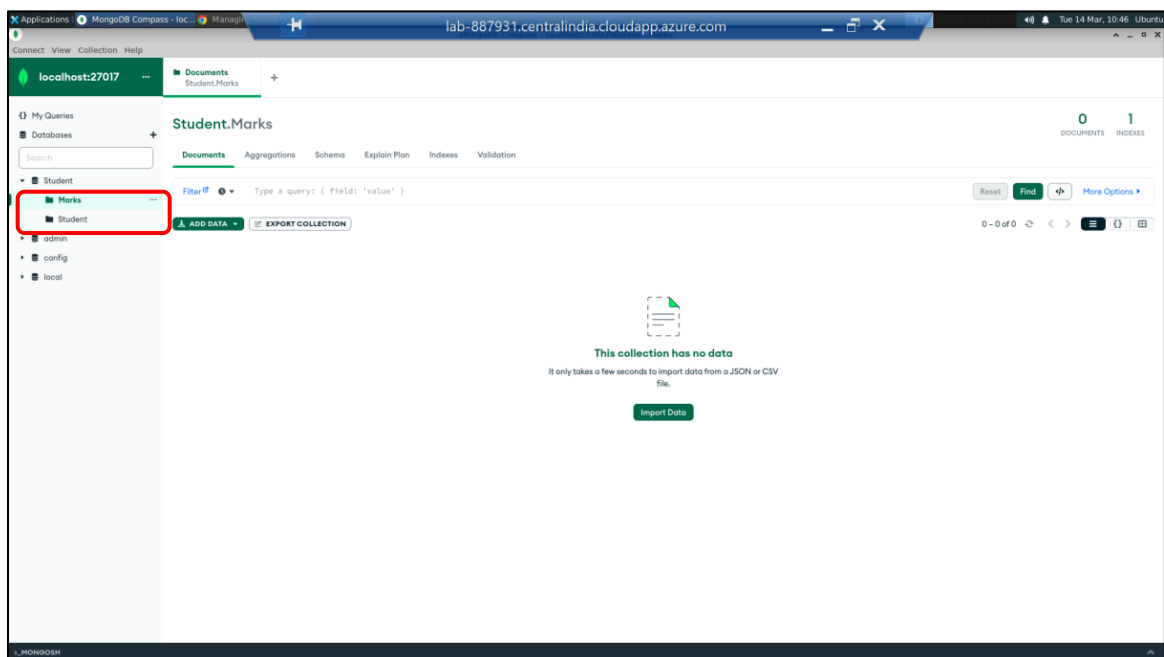


The collection will be created inside the database.

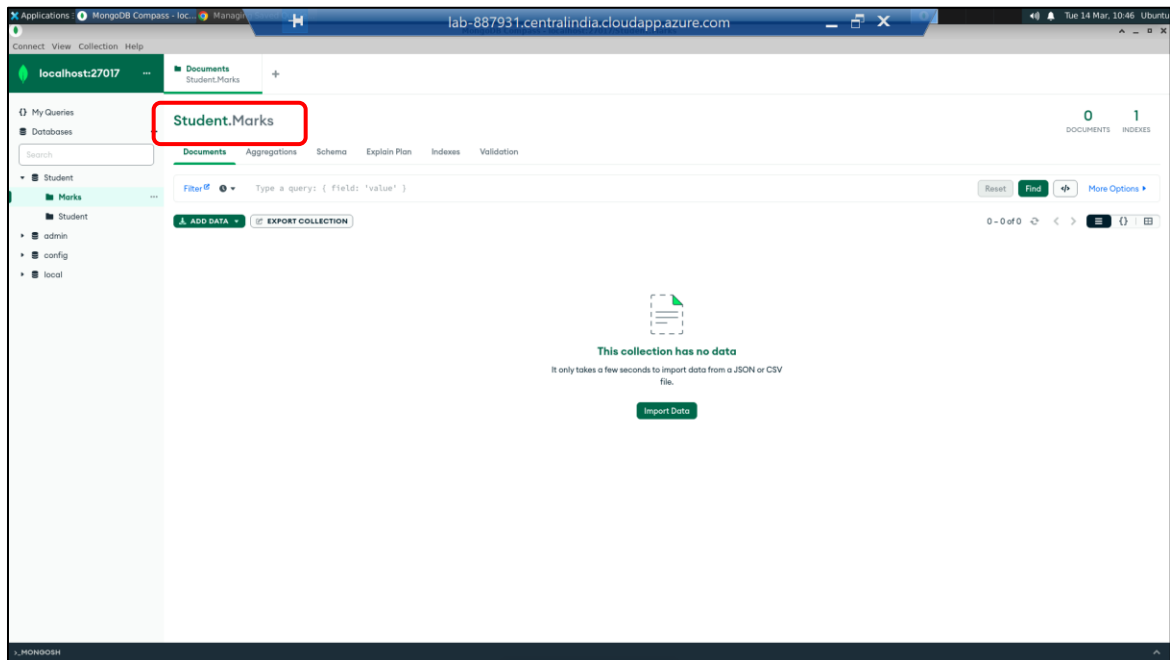


The creation of the Database and the collection is complete.

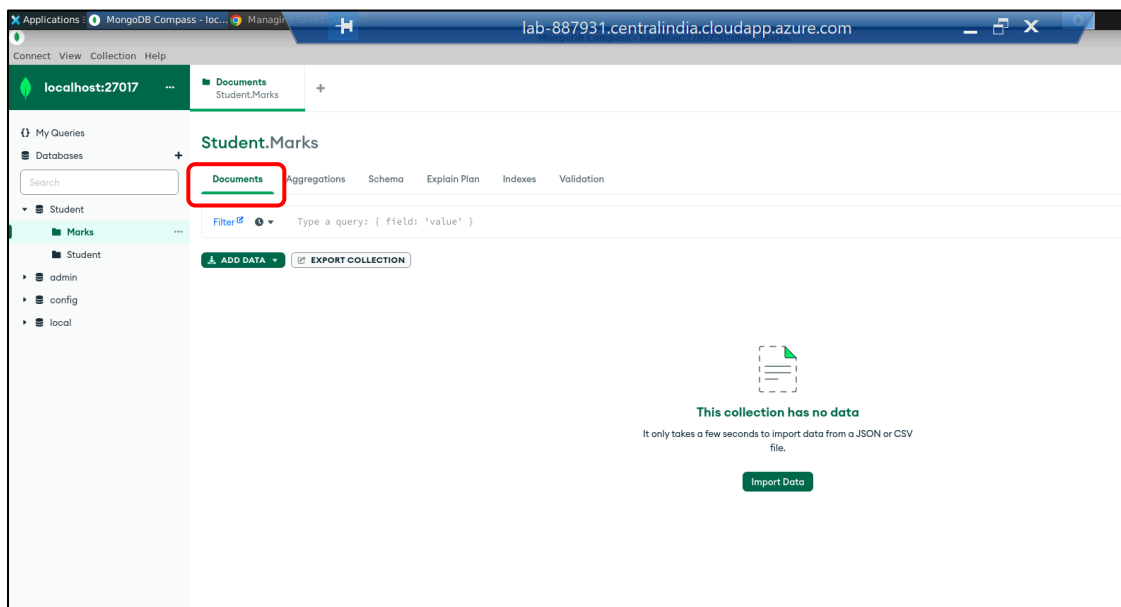
3.3 Click on the **collection name** to open the collection



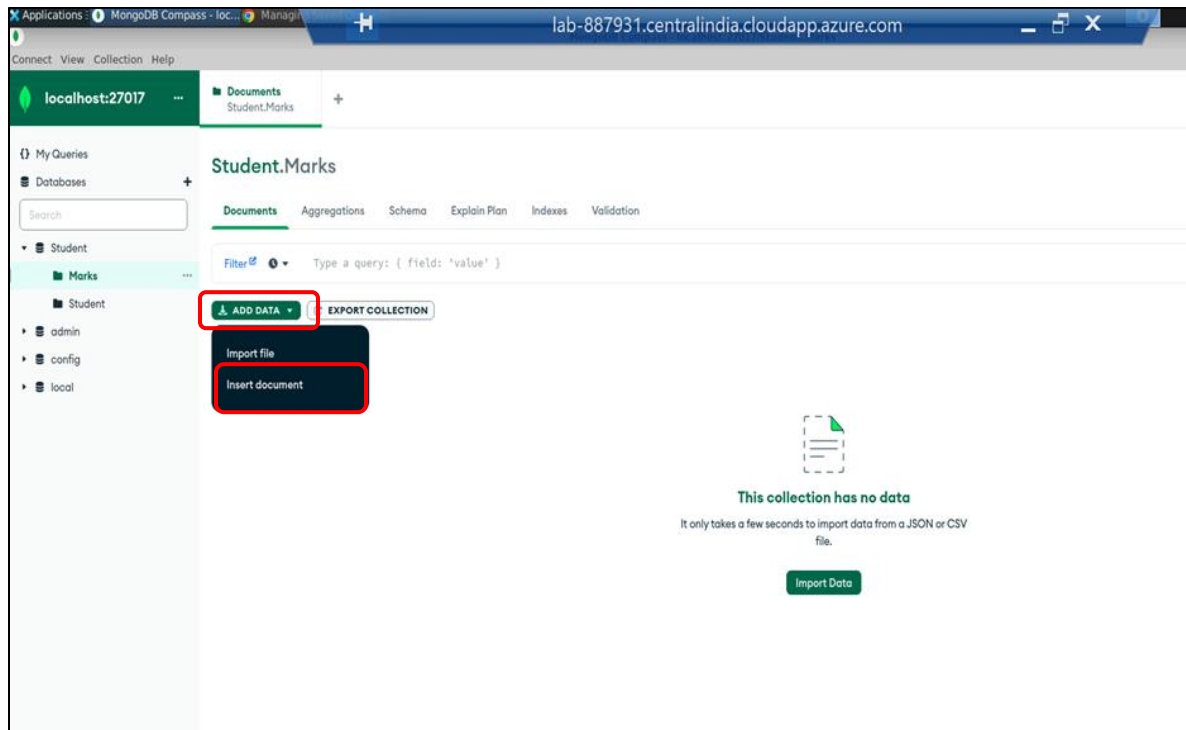
3.4 Select the collection to create the document



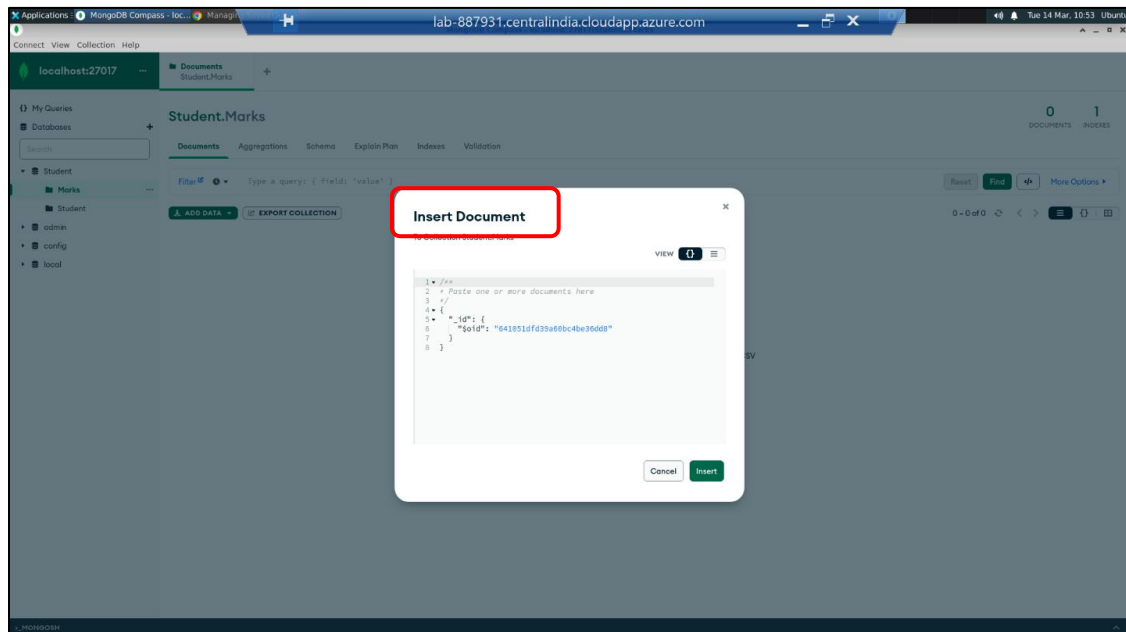
3.5 Click on the **Documents** tab at the top of the screen



3.6 Click on the **ADD DATA** button and select **Insert document**

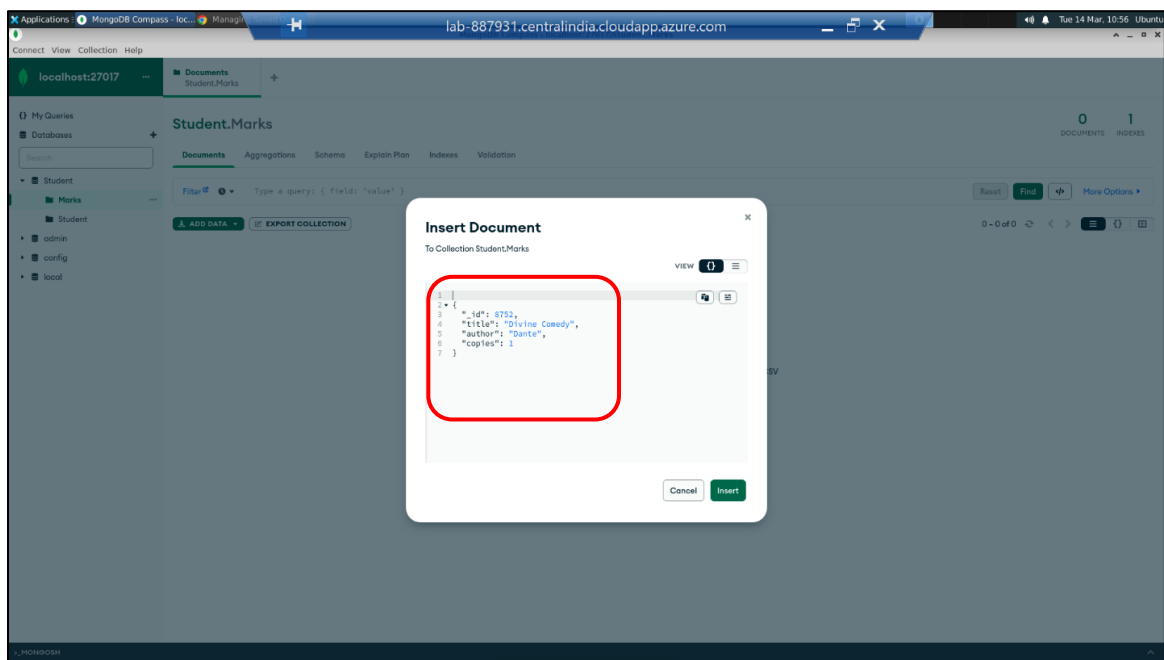


A pop-up window for **Insert Document** will open.

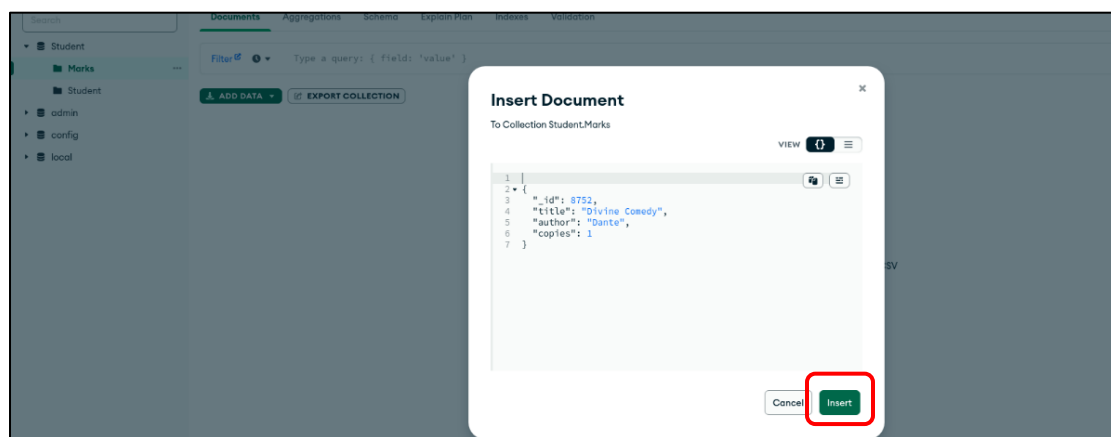


3.7 Enter the following code in the specified field to access the data

```
{
  "_id" : 0752,
  "title" : "Divine Comedy",
  "author" : "Dante",
  "copies" : 1
}
```

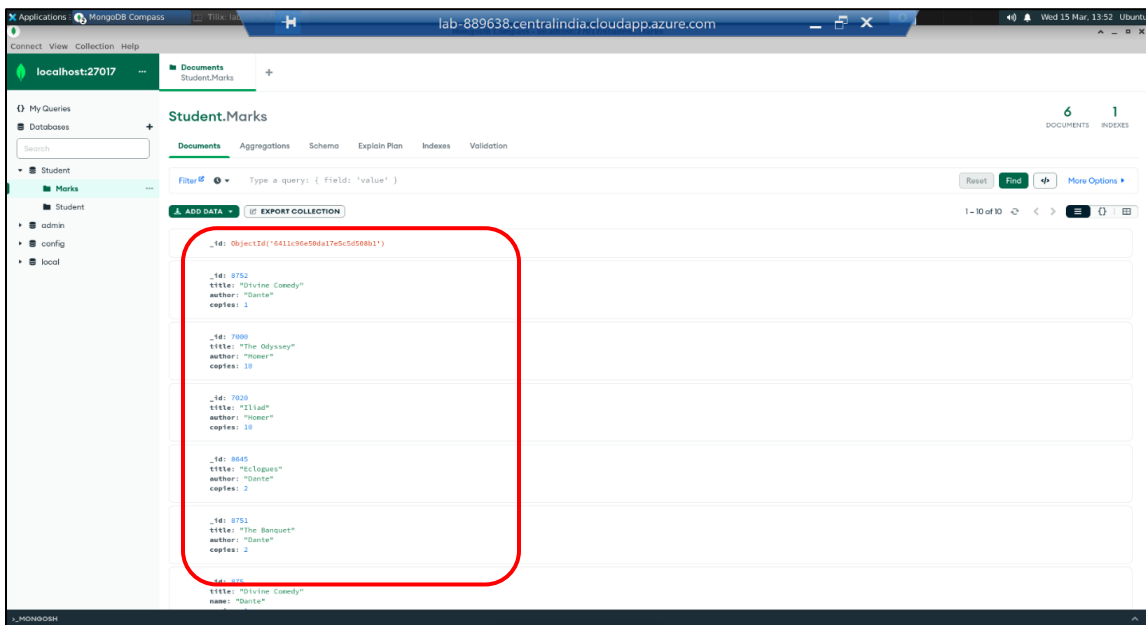
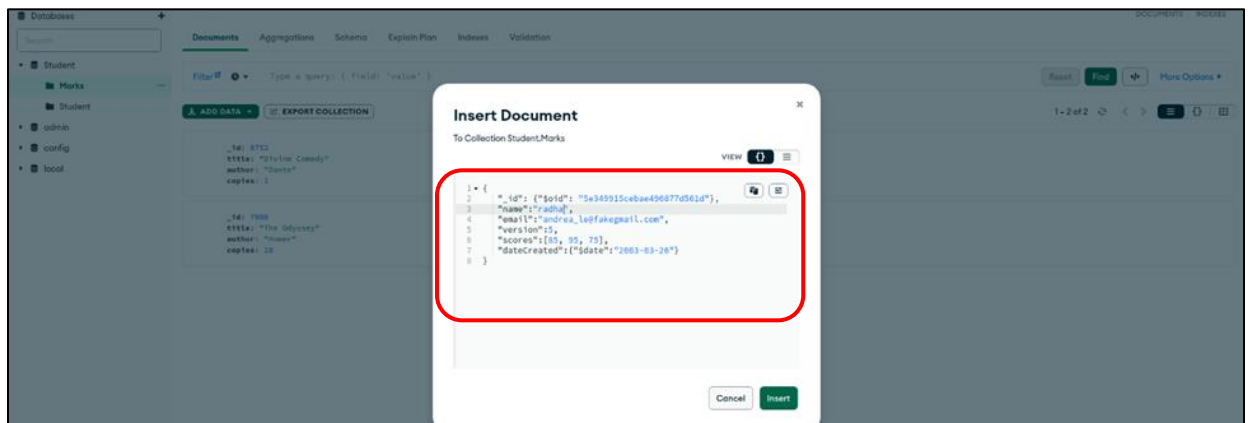


3.8 Click on the **Insert** button to add the document



3.9 Enter the following commands to add more documents and click on **Insert**

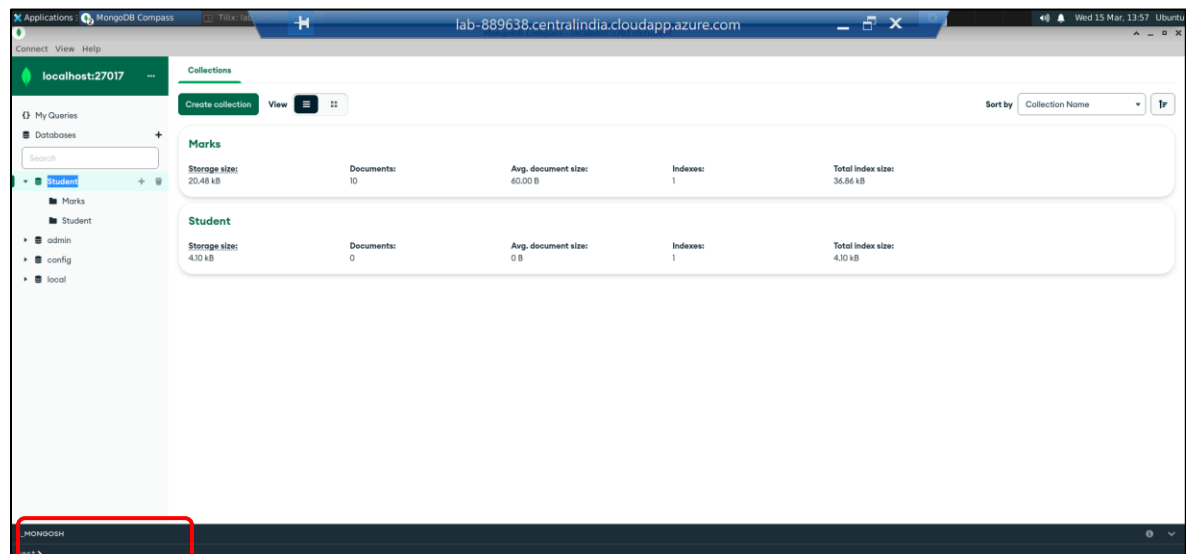
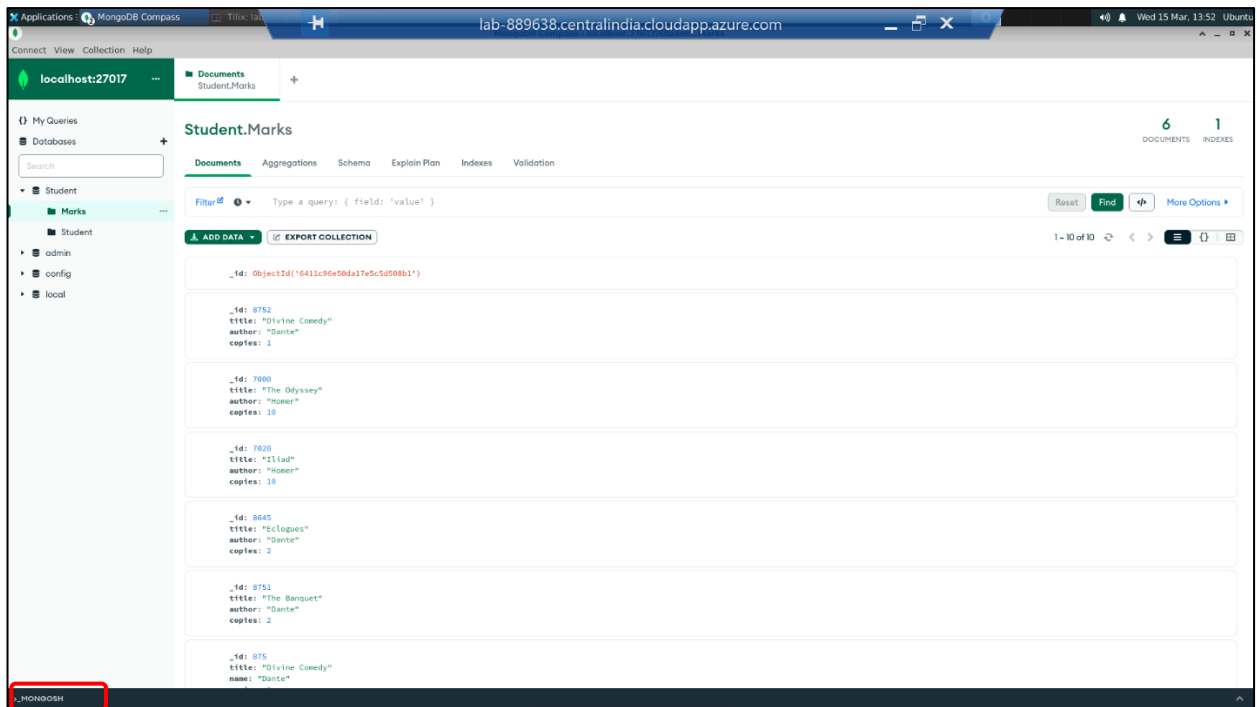
```
{
  "_id" : 8752,
  "title" : "Divine Comedy",
  "author" : "Dante",
  "copies" : 1
}
```



The inserted fields can be viewed under the documents in the collection.

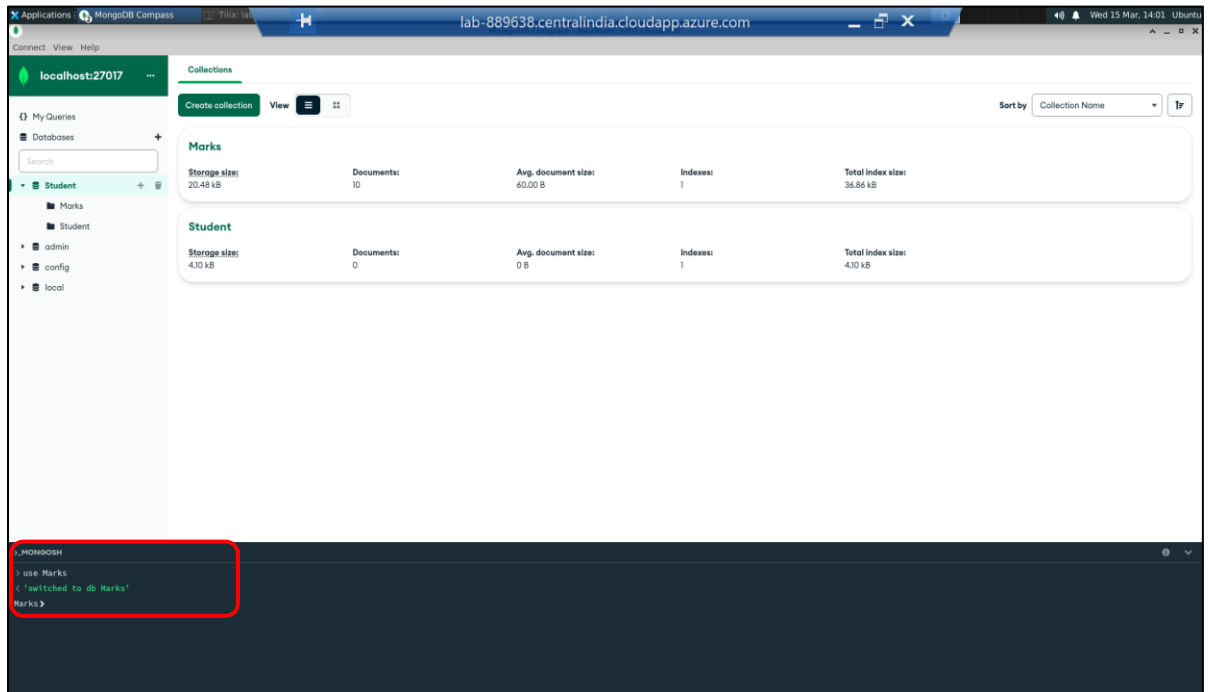
Step 4: Perform the read operation

4.1 Click on the **mongosh** tab at the bottom of the MongoDB Compass window



A small command line window will appear where the shell is connected to the default database test.

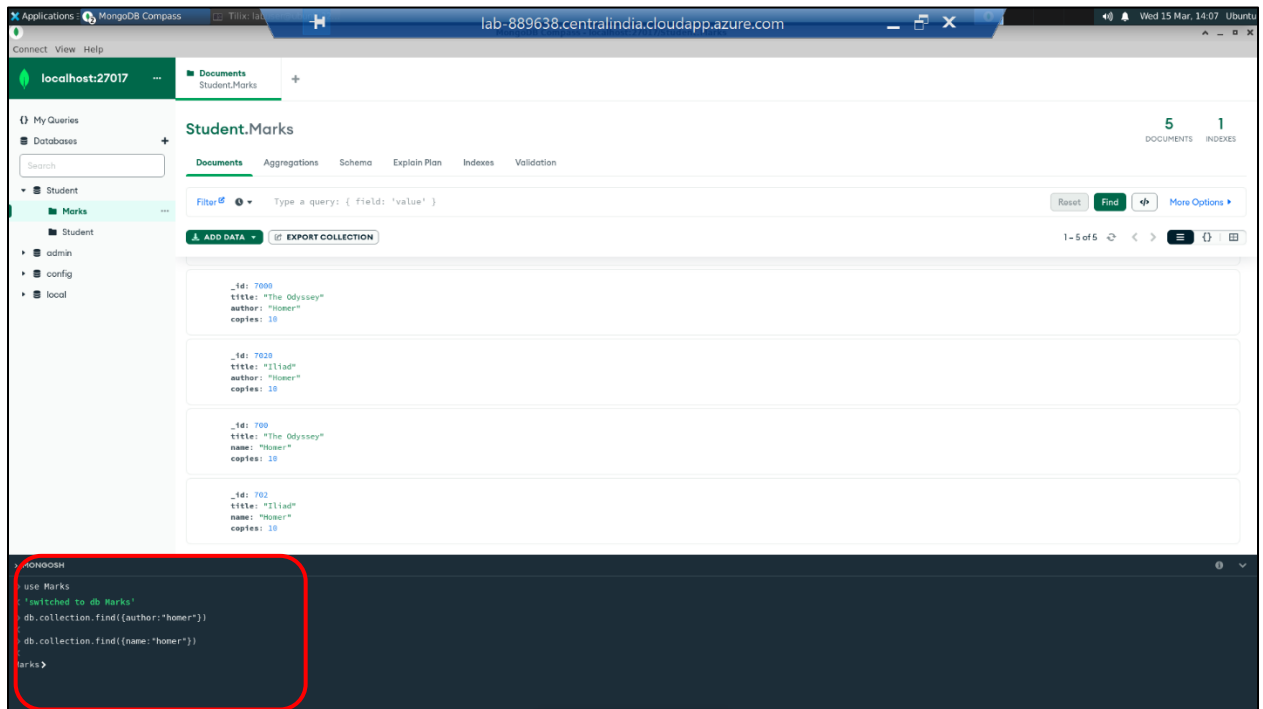
4.2 In the MongoDB Compass Shell, type the **use <collection_name>** command to navigate into the working database
use Marks



4.3 In the MongoDB Compass Shell, type in the **db.collection.find()** command to read documents from the selected database

db.collection.find({author : "homer" })

db.collection.find({name : "homer" })



By following these steps, you have successfully performed the read operation for querying a collection of documents in MongoDB.