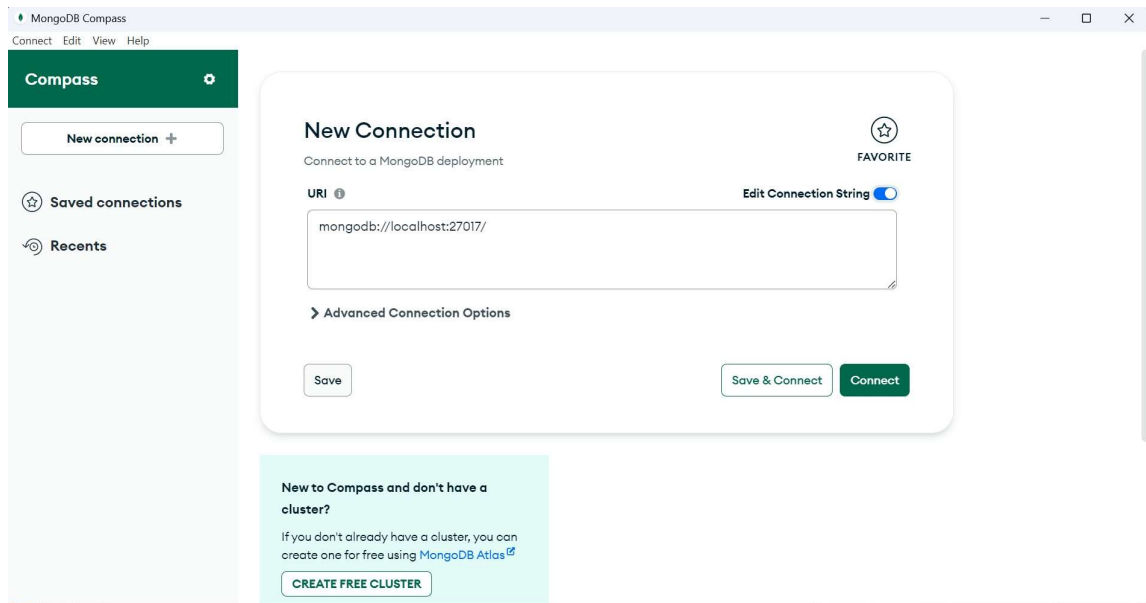
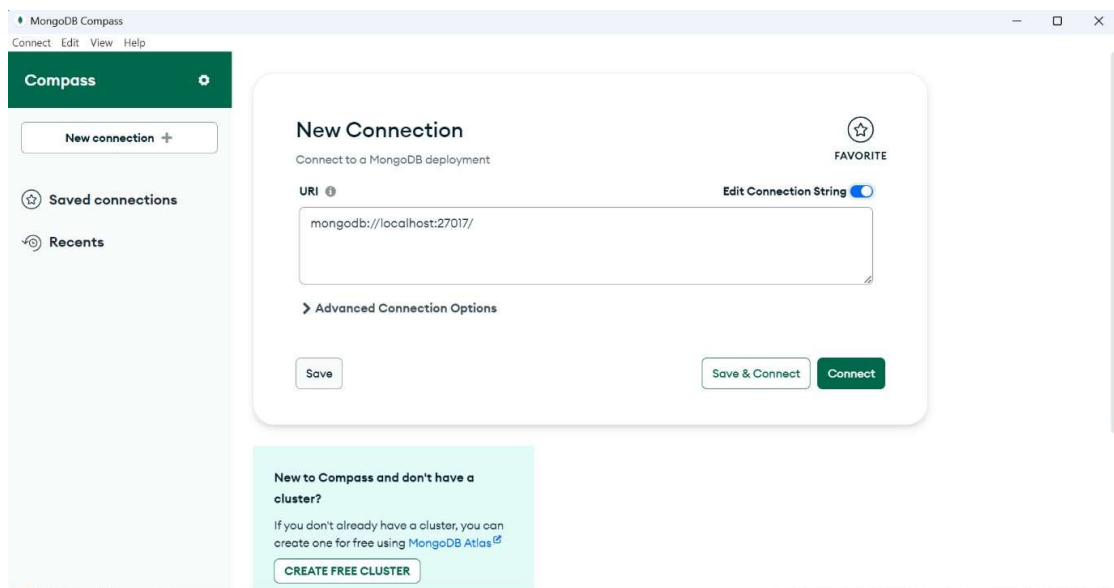

WEB TECHNOLOGY

LAB-10

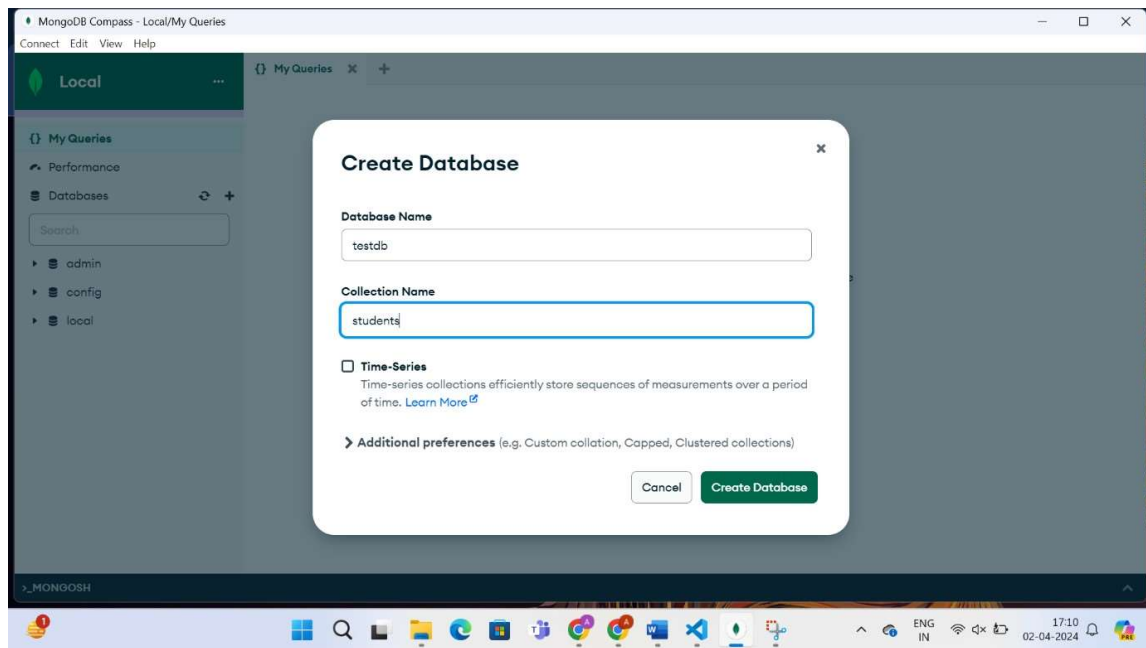
Connect to a MongoDB server using MongoDB Compass.



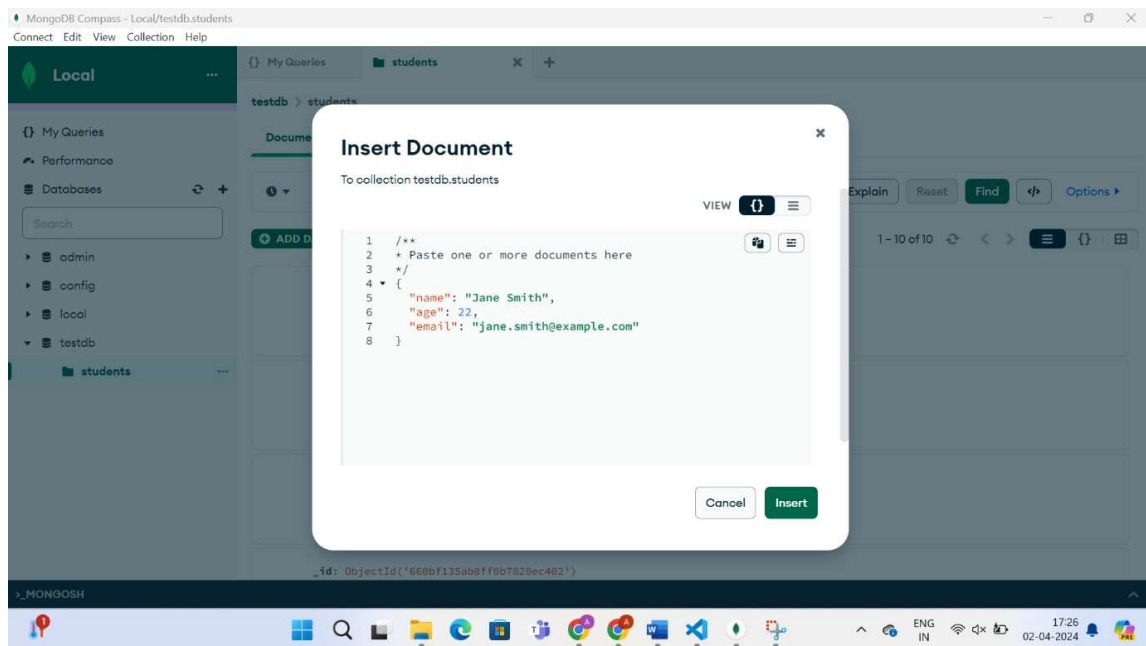
Create a new database named "testdb" in MongoDB Compass.



Create a new collection named "students" in the "testdb" database.



**Insert ten documents into the "students" collection with the following fields:
name, age, and email.**



View the contents of the "students" collection.

MongoDB Compass - Local/testdb.students

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Type a query: { field: 'value' } or [Generate query](#)

Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 10 of 10

	_id	name	age	email
1	ObjectId('660bf0f7ab8ff0b...')	John Doe	28	john.doe@example.com
2	ObjectId('660bf113ab8ff0b...')	Jane Smith	22	jane.smith@example.com
3	ObjectId('660bf126ab8ff0b...')	Michael Johnson	21	michael.johnson@example.com
4	ObjectId('660bf135ab8ff0b...')	Emily Brown	19	emily.brown@example.com
5	ObjectId('660bf14dab8ff0b...')	David Wilson	23	david.wilson@example.com
6	ObjectId('660bf1b7ab8ff0b...')	Sarah Martinez	28	sarah.martinez@example.com
7	ObjectId('660bf1c9ab8ff0b...')	Christopher Taylor	24	christopher.taylor@example.com
8	ObjectId('660bf1daab8ff0b...')	Jessica Anderson	22	jessica.anderson@example.com
9	ObjectId('660bf1e8ab8ff0b...')	Ryan Thomas	21	ryan.thomas@example.com
10	ObjectId('660bf1f0ab8ff0b...')	Amanda Garcia	29	amanda.garcia@example.com

> MONGODB

Update the age of a specific student in the "students" collection.

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Type a query: {} or [Generate query](#)

Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 10 of 10

```
1 _id: ObjectId('660bf0f7ab8ff0b7020ec3fc')
2 name: "John Doe"
3 age: 28
4 email: "john.doe@example.com"
```

Document modified.

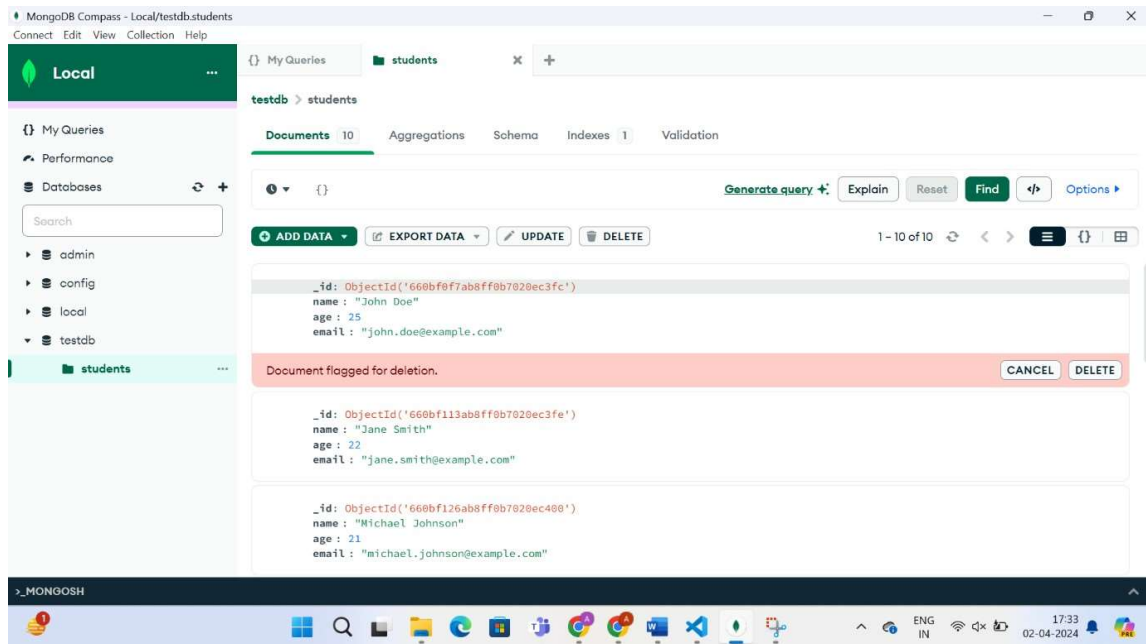
CANCEL UPDATE

```
_id: ObjectId('660bf113ab8ff0b7020ec3fe')
name: "Jane Smith"
age: 22
email: "jane.smith@example.com"
```

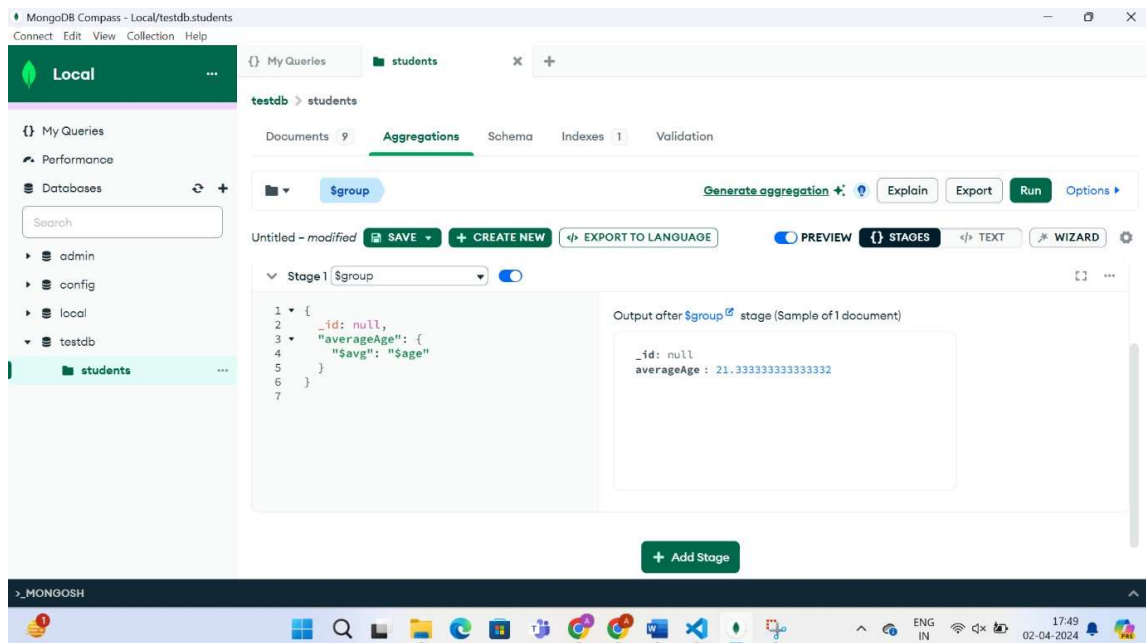
```
_id: ObjectId('660bf126ab8ff0b7020ec400')
name: "Michael Johnson"
age: 21
email: "michael.johnson@example.com"
```

> MONGODB

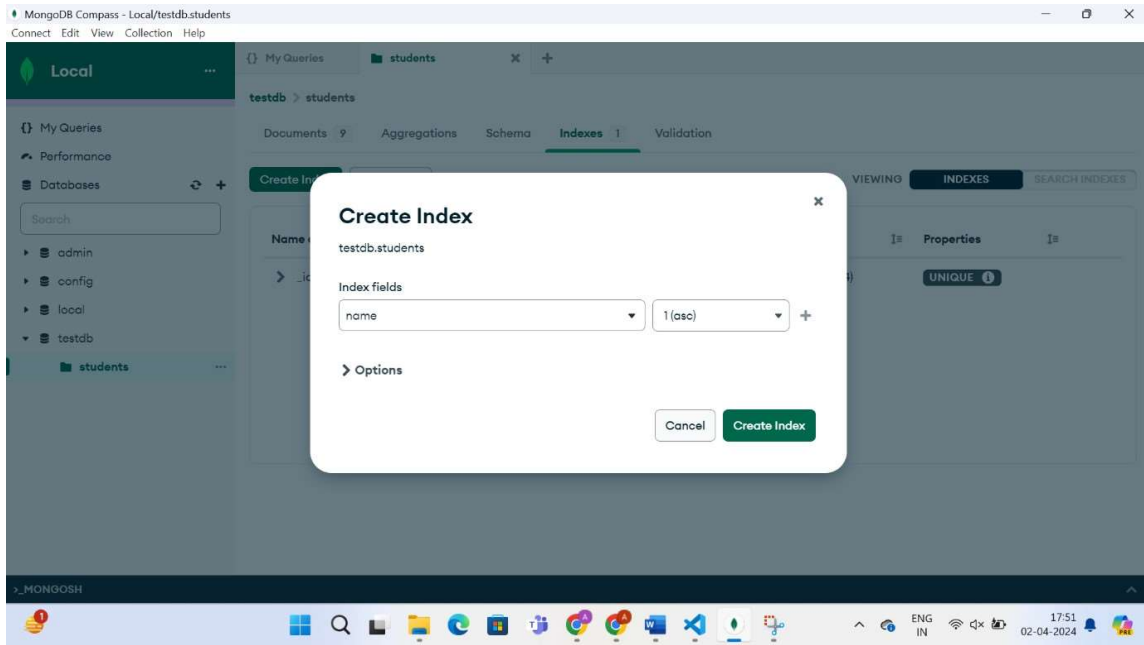
Delete a document from the "students" collection based on a specific condition.



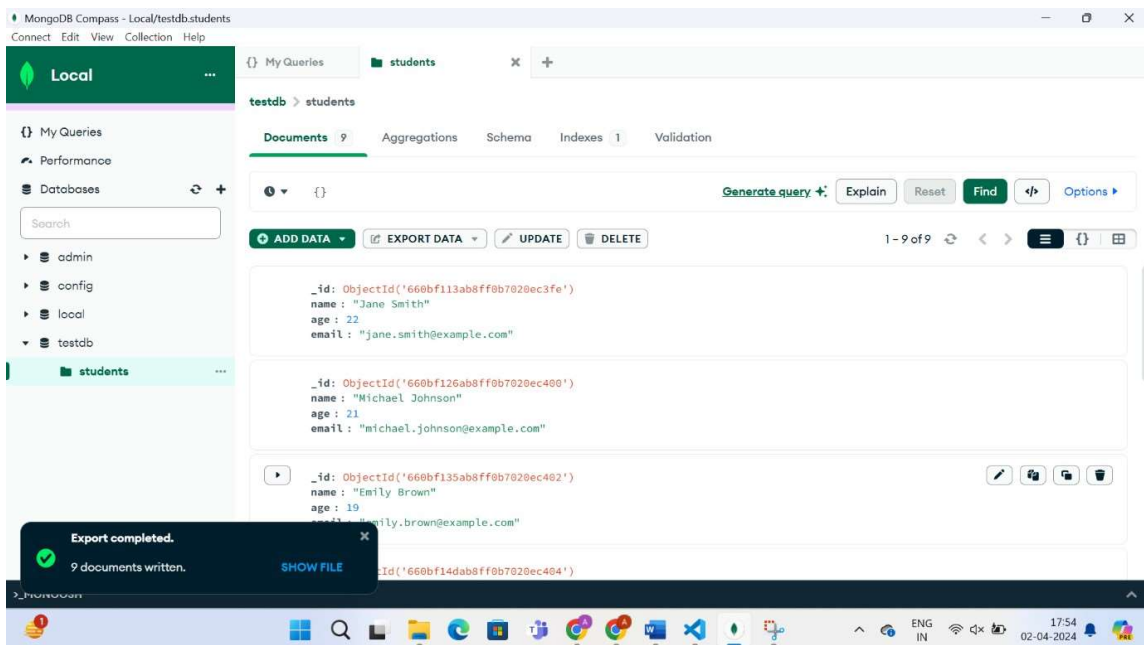
Use the aggregation pipeline to calculate the average age of all students in the "students" collection.



Create an index on the "name" field in the "students" collection.



Export the contents of the "students" collection to a JSON file.



Perform a complex aggregation operation to find the top 5 oldest students in the "students" collection.

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Generate aggregation Explain Export Run Options

Untitled - modified SAVE CREATE NEW EXPORT TO LANGUAGE PREVIEW STAGES TEXT WIZARD

Stage 2 \$sort

```
1 [
2   {
3     "$sort": {
4       "age": -1
5     }
6   },
7   {
8     "$limit": 5
9   }
10 ]
```

>_MONGOSH

17:56 02-04-2024

Create a geospatial index on a field representing the location of students.

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Create Index Refresh

VIEWING INDEXES SEARCH INDEXES

Name and Definition	Type	Size	Usage	Properties
> _id_	REGULAR	36.9 KB	13 (since Tue Apr 02 2024)	UNIQUE
> name_1	REGULAR	20.5 KB	0 (since Tue Apr 02 2024)	
> students_2dsphere	GEOSPATIAL	8.2 KB	0 (since Tue Apr 02 2024)	

>_MONGOSH

17:59 02-04-2024