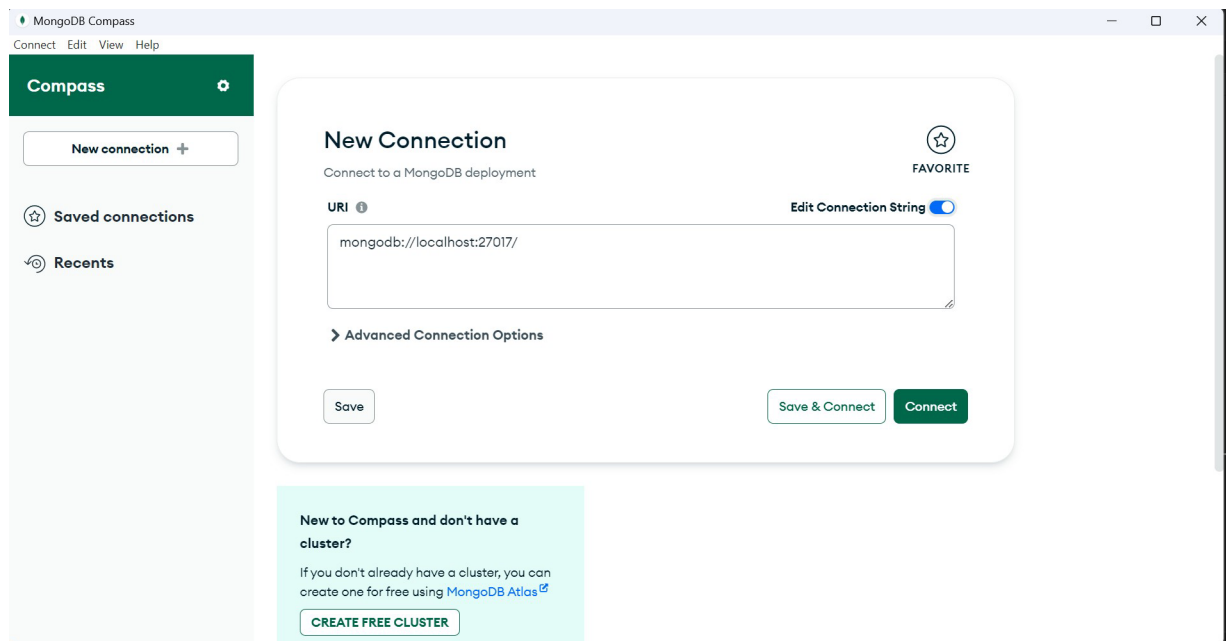
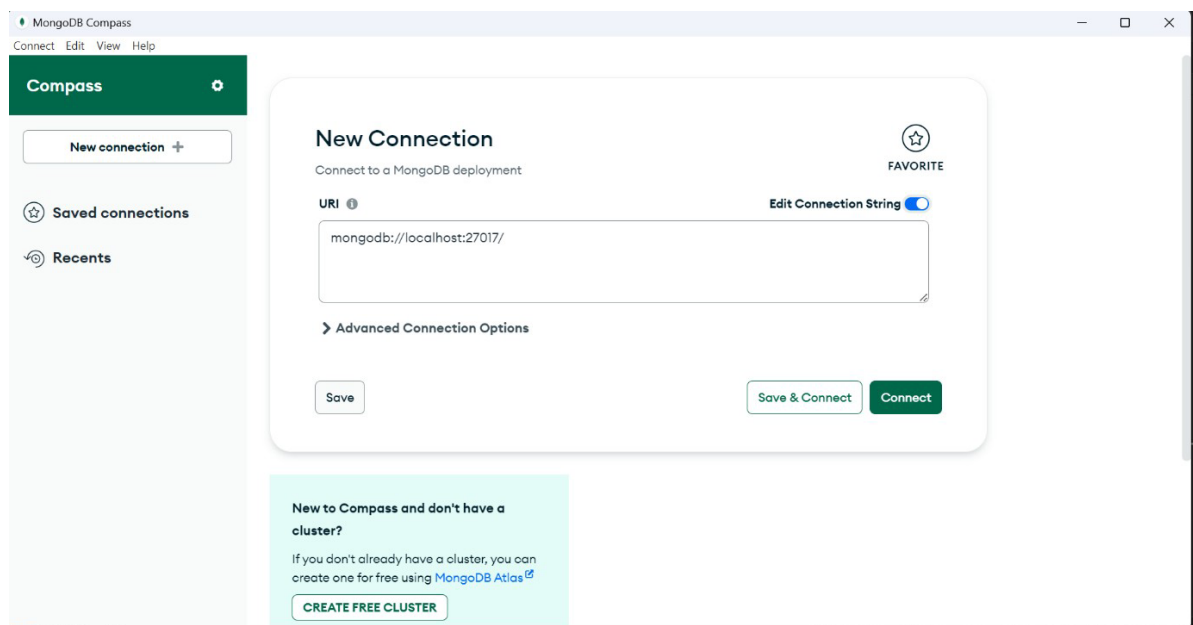


LAB-10

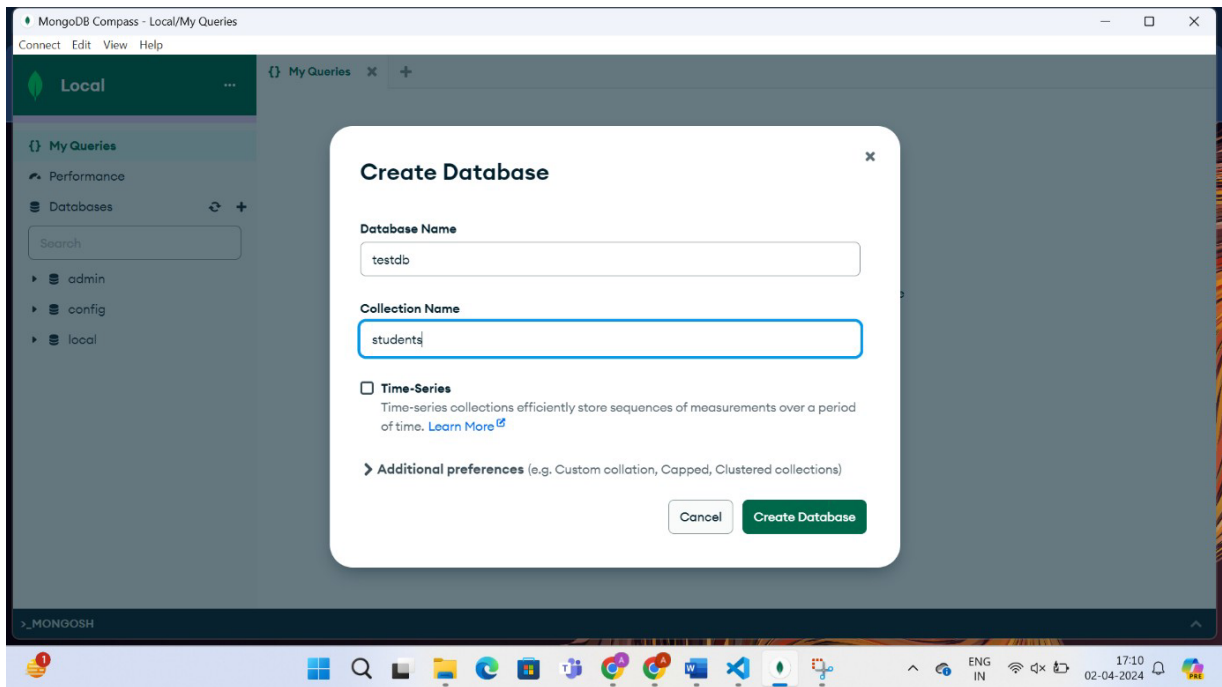
Connect to a MongoDB server using MongoDB Compass.



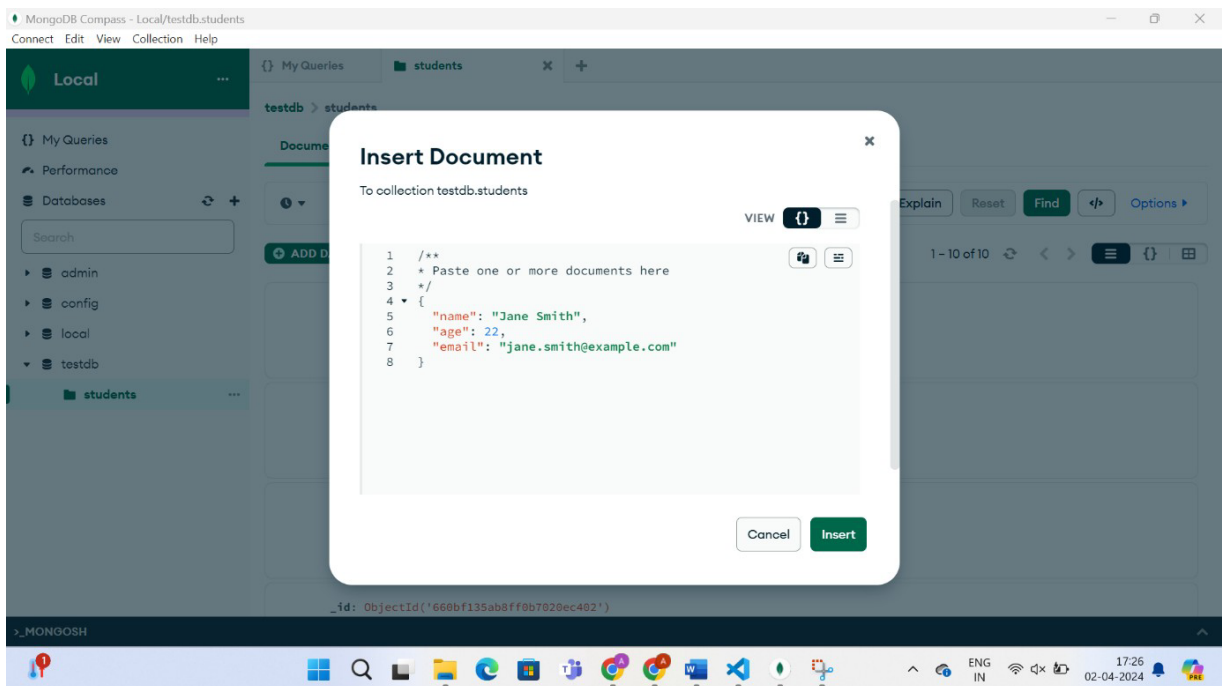
Create a new database named "testdb" in MongoDB Compass.



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

Connect Edit View Collection Help

Local

My Queries

Performance

Databases

Search

admin

config

local

testdb

students

My Queries

students

Documents 10

Aggregations

Schema

Indexes 1

Validation

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	20	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	20	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	20	amanda.garcia@example.com

>_MONGOSH

17:28 02-04-2024

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

MongoDB Compass - Local/testdb.students

Connect Edit View Collection Help

Local

My Queries

Performance

Databases

Search

admin

config

local

testdb

students

My Queries

students

Documents 10

Aggregations

Schema

Indexes 1

Validation

Type a query: {}

Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

UPDATE

DELETE

1 - 10 of 10

Document modified.

CANCEL

UPDATE

```
{
  "_id": ObjectId('660bf0f7ab8ff0b7020ec3fc'),
  "name": "John Doe",
  "age": 25,
  "email": "john.doe@example.com"
}
```

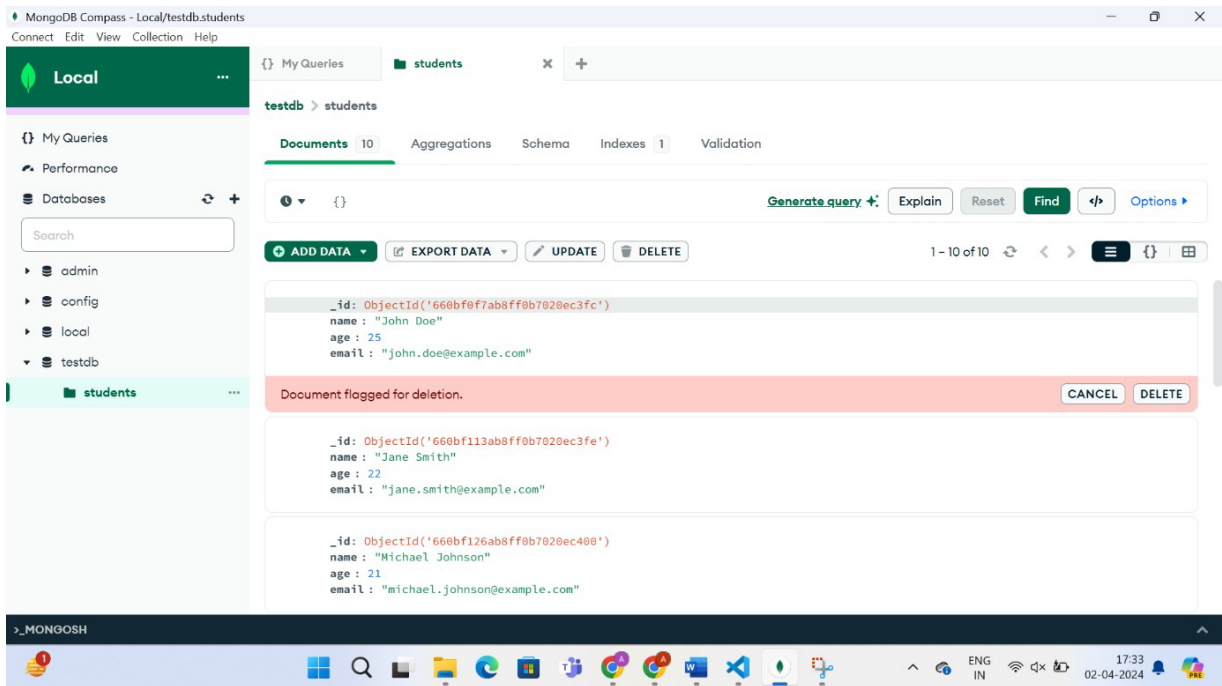
```
{
  "_id": ObjectId('660bf113ab8ff0b7020ec3fe'),
  "name": "Jane Smith",
  "age": 22,
  "email": "jane.smith@example.com"
}
```

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

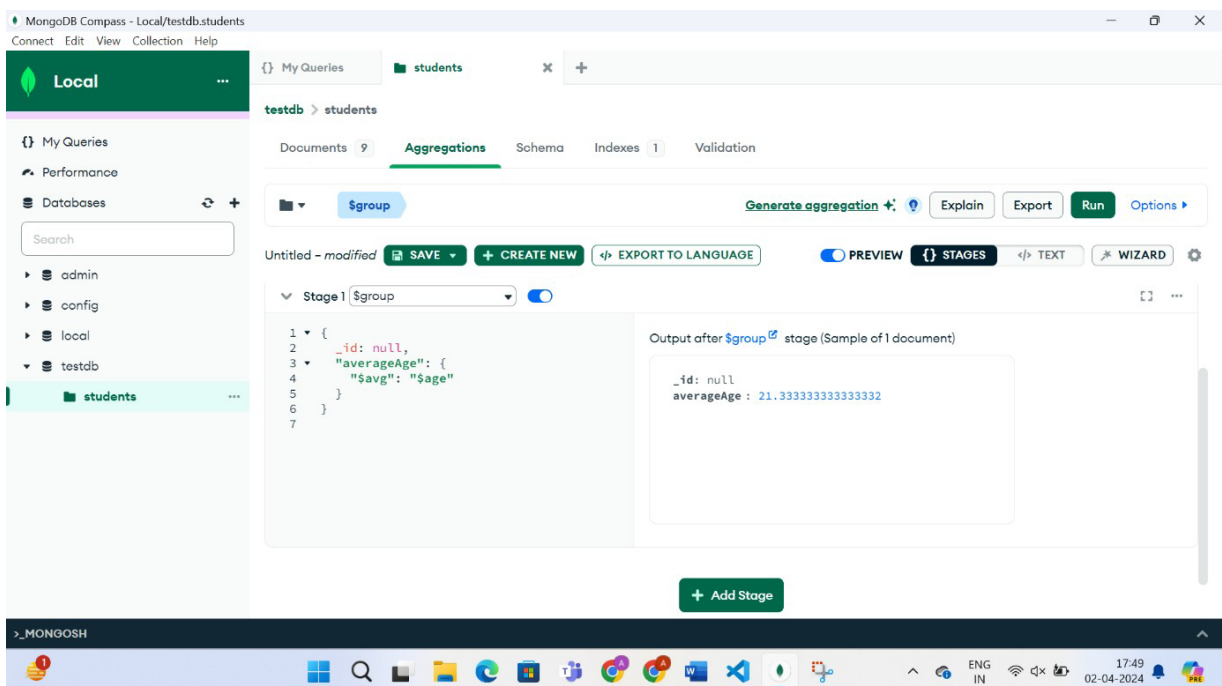
>_MONGOSH

17:31 02-04-2024

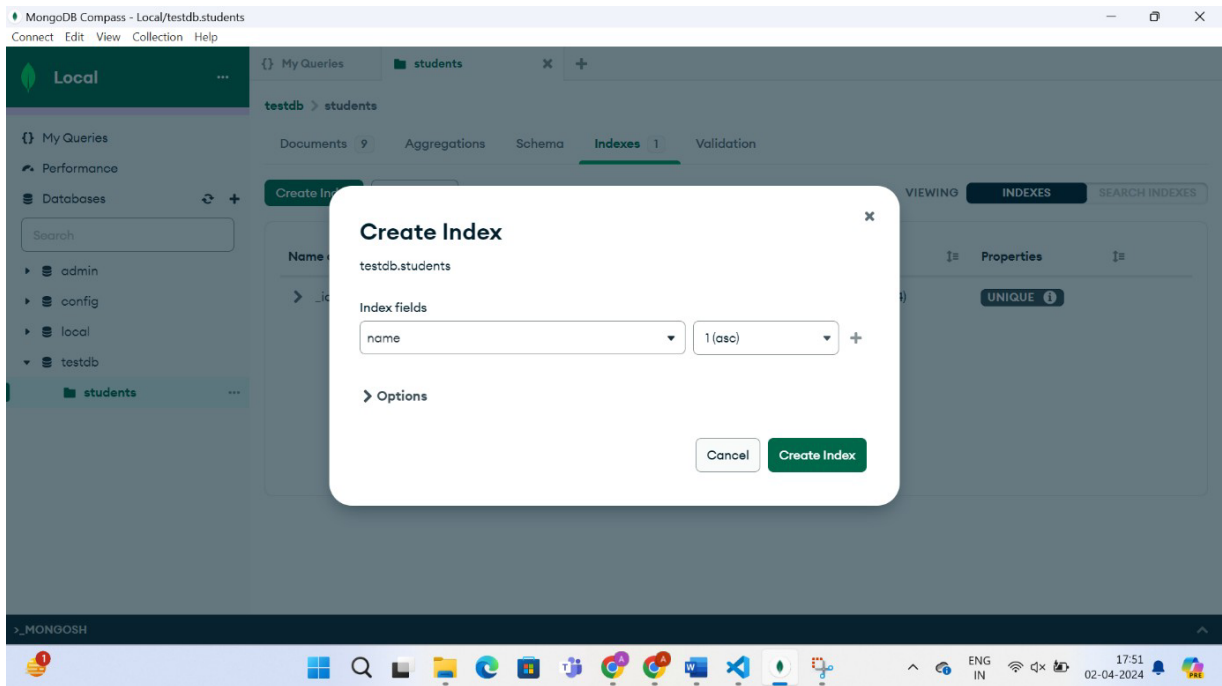
Delete a document from the "students" collection based on a specific condition.



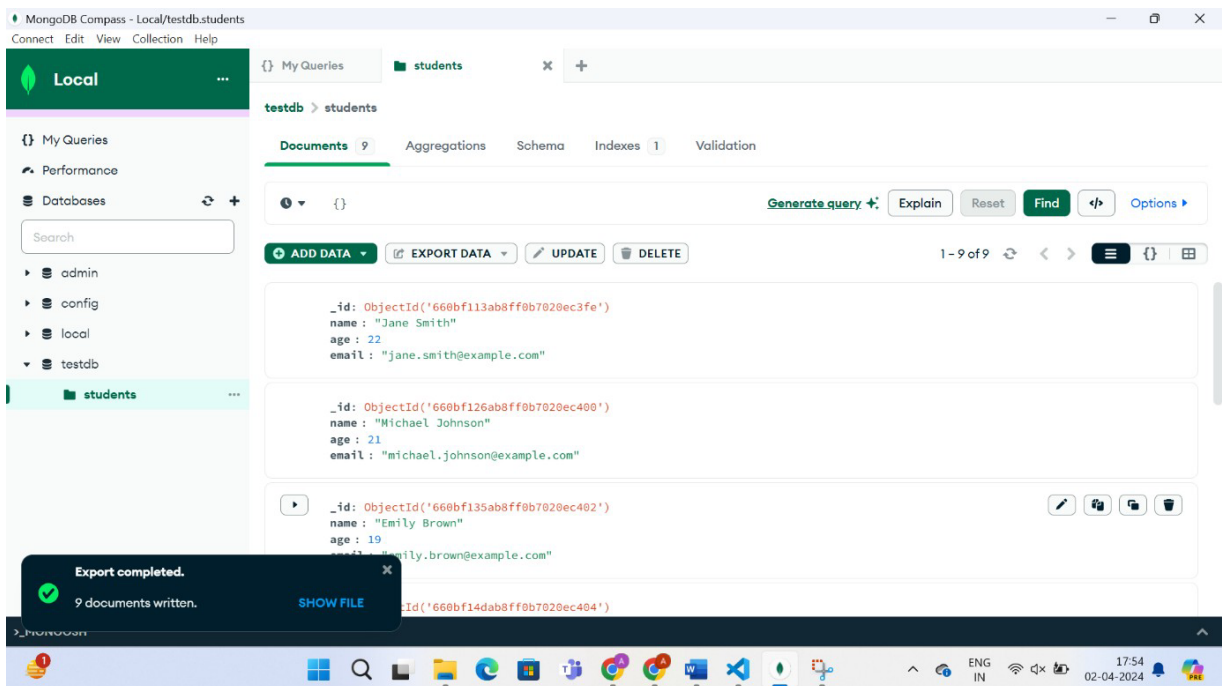
Use the aggregation pipeline to calculate the average age of all students in the "students" collection.



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.

MongoDB Compass - Local/testdb.students

Connect Edit View Collection Help

Local

My Queries Performance Databases Search

admin config local testdb students

students

Documents 9 Aggregations Schema Indexes 1 Validation

\$group \$sort 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.

MongoDB Compass - Local/testdb.students

Connect Edit View Collection Help

Local

My Queries Performance Databases Search

admin config local testdb students

students

Documents 9 Aggregations Schema Indexes 1 Validation

Create Index Refresh VIEWING INDEXES SEARCH INDEXES

Name and Definition	Type	Size	Usage	Properties
> _id_	REGULAR	35.9 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