

LAB 09: WEB TECHNOLOGY

1.

The screenshot displays the MongoDB Compass application interface. The top window shows the 'New Connection' dialog, where the URI is set to 'mongodb://localhost:27017/'. The left sidebar lists 'Saved connections' and 'Recents'. The bottom window shows the 'My Queries' tab, which is currently empty, displaying the message 'No saved queries yet.' and a link to 'Visit our Docs'.

MongoDB Compass - New Connection

Connect to a MongoDB deployment

URI Edit Connection String

mongodb://localhost:27017/

Advanced Connection Options

Save Save & Connect Connect

Now to Compass and don't have a cluster?

If you don't already have a cluster, you can create one for free using [MongoDB Atlas](#)

[CREATE FREE CLUSTER](#)

How do I find my connection string in Atlas?

If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect.

[See example](#)

How do I format my connection string?

[See example](#)

MongoDB Compass - localhost:27017/My Queries

My Queries

My Queries

Performance

Databases

Search

Real

Test

admin

config

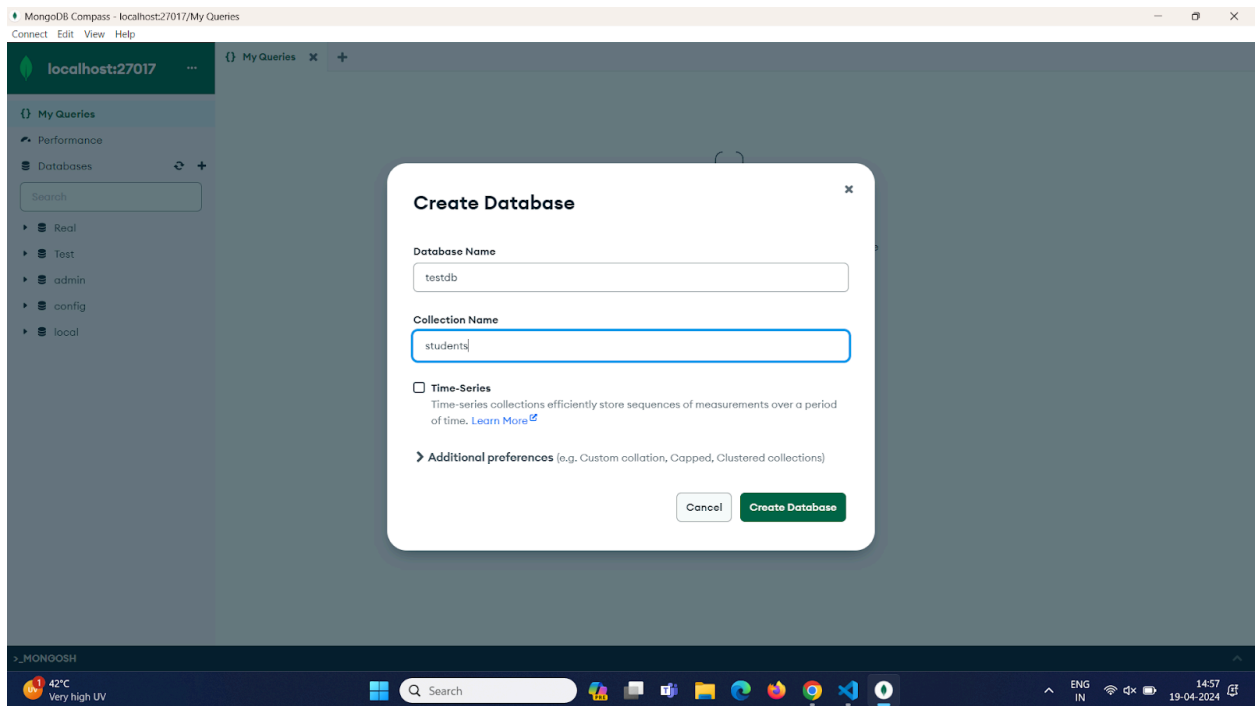
local

No saved queries yet.

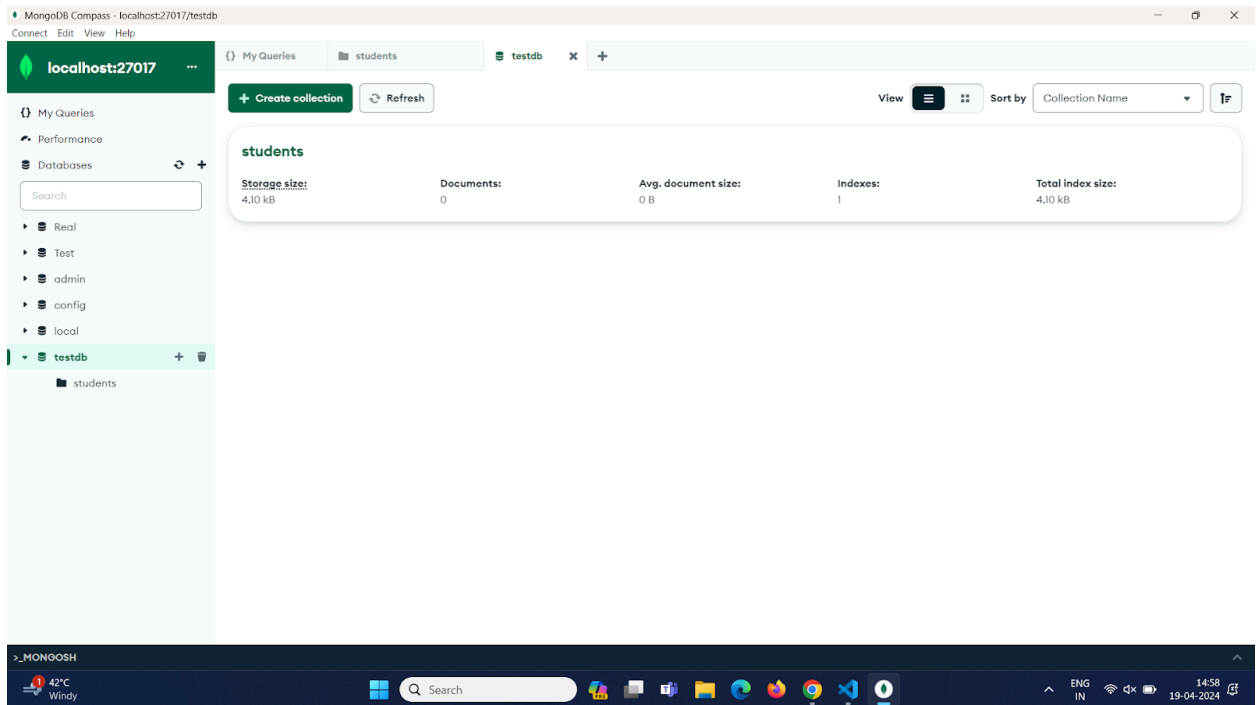
Start saving your aggregations and find queries, you'll see them here.

Not sure where to start? [Visit our Docs](#)

2.



3.



4. Json file to add the data

```
[
  { "name": "Shubham", "age": 25, "email": "shubham@example.com" },
  { "name": "Sarthak", "age": 23, "email": "sarthak@example.com" },
  { "name": "Kuntal", "age": 22, "email": "kuntal@example.com" },
  { "name": "Shikhar", "age": 24, "email": "shikhar@example.com" },
  { "name": "Dhote", "age": 21, "email": "dhote@example.com" },
  { "name": "Saurabh", "age": 26, "email": "saurabh@example.com" },
  { "name": "Rohit", "age": 27, "email": "rohit@example.com" },
  { "name": "Rishi", "age": 24, "email": "rishi@example.com" },
  { "name": "Saksham", "age": 22, "email": "saksham@example.com" },
  { "name": "Shriansh", "age": 23, "email": "shriansh@example.com" }
]
```

5.

MongoDB Compass - localhost:27017/testdb.students

Connect Edit View Collection Help

localhost:27017

My Queries students testdb

testdb > 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 ObjectId	name String	age Int32	email String
1	ObjectId('66223a289613432...')	"Shubham"	25	"shubham@example.com"
2	ObjectId('66223a289613432...')	"Sarthak"	23	"sarthak@example.com"
3	ObjectId('66223a289613432...')	"Kuntal"	22	"kuntal@example.com"
4	ObjectId('66223a289613432...')	"Shikhar"	24	"shikhar@example.com"
5	ObjectId('66223a289613432...')	"Dhote"	21	"dhote@example.com"
6	ObjectId('66223a289613432...')	"Saurabh"	26	"saurabh@example.com"
7	ObjectId('66223a289613432...')	"Rohit"	27	"rohit@example.com"
8	ObjectId('66223a289613432...')	"Rishi"	24	"rishi@example.com"
9	ObjectId('66223a289613432...')	"Saksham"	22	"saksham@example.com"
10	ObjectId('66223a289613432...')	"Shriansh"	23	"shriansh@example.com"

42°C Windy

Search

ENG IN 15:02 19-04-2024

6.

MongoDB Compass - localhost:27017/testdb.students

localhost:27017

My Queries Performance Databases Search

Real Test admin config local testdb

students

testdb > students

Documents 10 Aggregations Schema Indexes 1 Validation

Generate query Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 10 of 10

	_id ObjectId	name String	age Int32	email String
1	ObjectId('66223a289613432...')	"Shubham"	25	"shubham@example.com"
2	ObjectId('66223a289613432...')	"Sarthak"	23	"sarthak@example.com"
3	ObjectId('66223a289613432...')	"Kuntal"	22	"kuntal@example.com"
4	ObjectId('66223a289613432...')	"Shikhar"	24	"shikhar@example.com"
5	ObjectId('66223a289613432...')	"Dhote"	22	"dhote@example.com"
Document modified.				
6	ObjectId('66223a289613432...')	"Saurabh"	26	"saurabh@example.com"
7	ObjectId('66223a289613432...')	"Rohit"	27	"rohit@example.com"
8	ObjectId('66223a289613432...')	"Rishi"	24	"rishi@example.com"
9	ObjectId('66223a289613432...')	"Saksham"	22	"saksham@example.com"
10	ObjectId('66223a289613432...')	"Shriansh"	23	"shriansh@example.com"

CANCEL UPDATE

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Search

ENG IN 15:07 19-04-2024

MongoDB Compass - localhost:27017/testdb.students

localhost:27017

My Queries Performance Databases Search

Real Test admin config local testdb

students

testdb > students

Documents 10 Aggregations Schema Indexes 1 Validation

Generate query Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 10 of 10

	_id ObjectId	name String	age Int32	email String
1	ObjectId('66223a289613432...')	"Shubham"	25	"shubham@example.com"
2	ObjectId('66223a289613432...')	"Sarthak"	23	"sarthak@example.com"
3	ObjectId('66223a289613432...')	"Kuntal"	22	"kuntal@example.com"
4	ObjectId('66223a289613432...')	"Shikhar"	24	"shikhar@example.com"
5	ObjectId('66223a289613432...')	"Dhote"	22	"dhote@example.com"
6	ObjectId('66223a289613432...')	"Saurabh"	26	"saurabh@example.com"
7	ObjectId('66223a289613432...')	"Rohit"	27	"rohit@example.com"
8	ObjectId('66223a289613432...')	"Rishi"	24	"rishi@example.com"
9	ObjectId('66223a289613432...')	"Saksham"	22	"saksham@example.com"
10	ObjectId('66223a289613432...')	"Shriansh"	23	"shriansh@example.com"

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42°C Windy

Search

ENG IN 15:07 19-04-2024

7.

MongoDB Compass - localhost:27017/testdb.students

Connect Edit View Collection Help

localhost:27017

My Queries Performance Databases Search

Real Test admin config local testdb students

testdb > students

Documents 10 Aggregations Schema Indexes 1 Validation

Generate query Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE 1 - 10 of 10

	_id ObjectId	name String	age Int32	email String
1	ObjectId("66223a289613432...")	"Shubham"	25	"shubham@example.com"
2	ObjectId("66223a289613432...")	"Sarthak"	23	"sarthak@example.com"
3	ObjectId("66223a289613432...")	"Kuntal"	22	"kuntal@example.com"
4	ObjectId("66223a289613432...")	"Shikhar"	24	"shikhar@example.com"
5	ObjectId("66223a289613432...")	"Dhote"	22	"dhote@example.com"
6	ObjectId("66223a289613432...")	"Saurabh"	No field	"saurabh@example.com"
7	ObjectId("66223a289613432...")	"Rohit"	27	"rohit@example.com"
8	ObjectId("66223a289613432...")	"Rishi"	24	"rishi@example.com"
9	ObjectId("66223a289613432...")	"Saksham"	22	"saksham@example.com"
10	ObjectId("66223a289613432...")	"Shriansh"	23	"shriansh@example.com"

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8.

MongoDB Compass - localhost:27017/testdb.students

Connect Edit View Collection Help

localhost:27017

My Queries Performance Databases Search

Real Test admin config local testdb students

testdb > students

Documents 10 Aggregations Schema Indexes 1 Validation

Explain Export Run Options

Collation { locale: 'simple' } Max Time MS 60000

to calculate the average age of all students in the "students" collection. Generate

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

Stage 1 \$group

```
1 {
2   _id: null,
3   averageAge: {
4     $avg: "$age",
5   },
6 }
```

Output after \$group stage (Sample of 1 document)

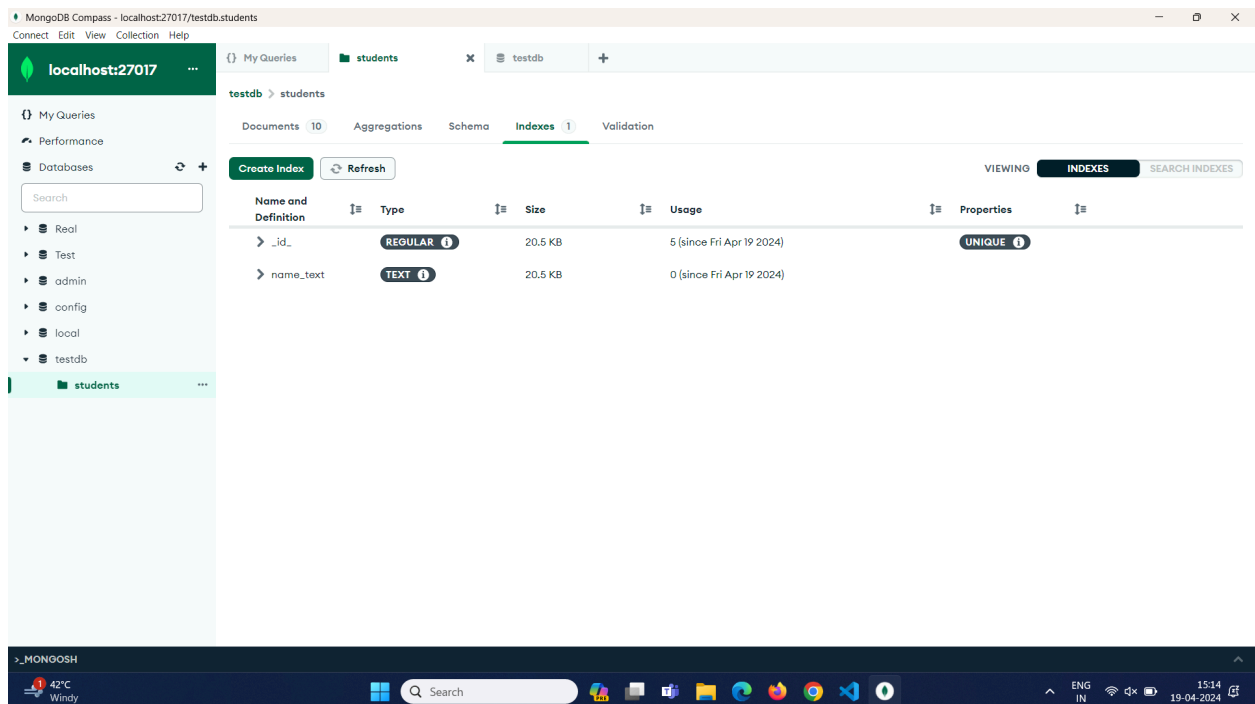
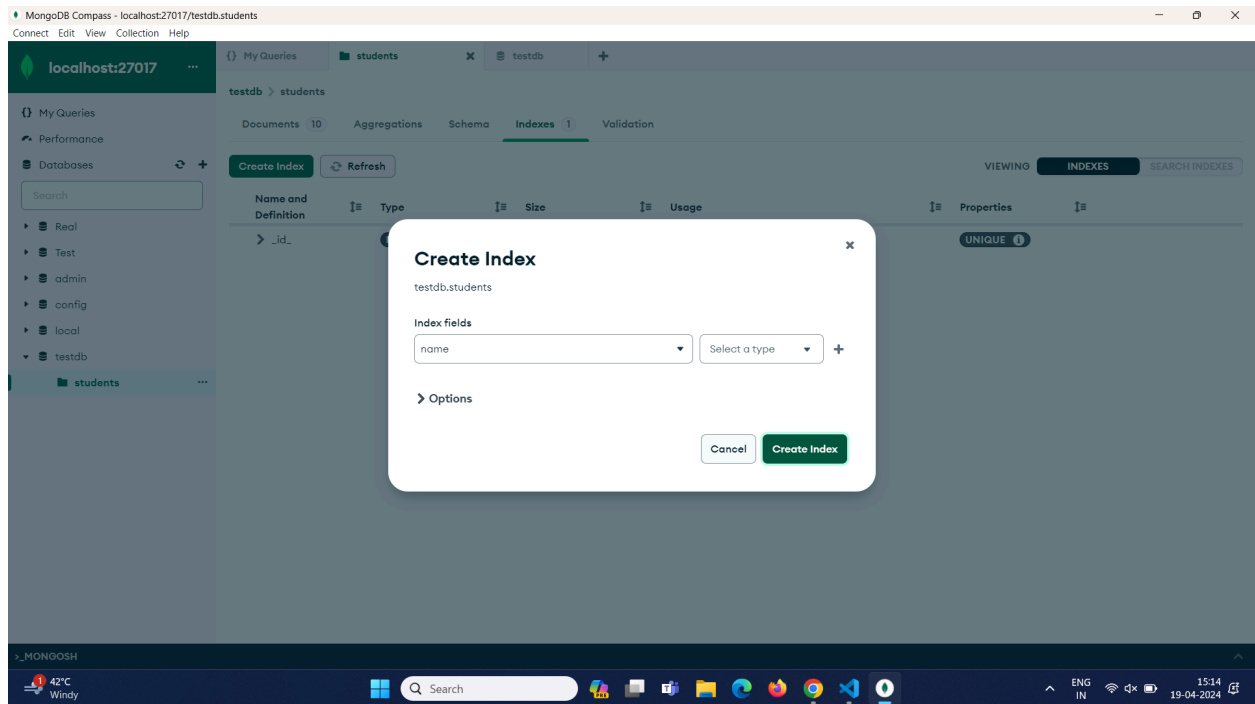
```
{
  _id: null
  averageAge: 23.5
}
```

+ Add Stage

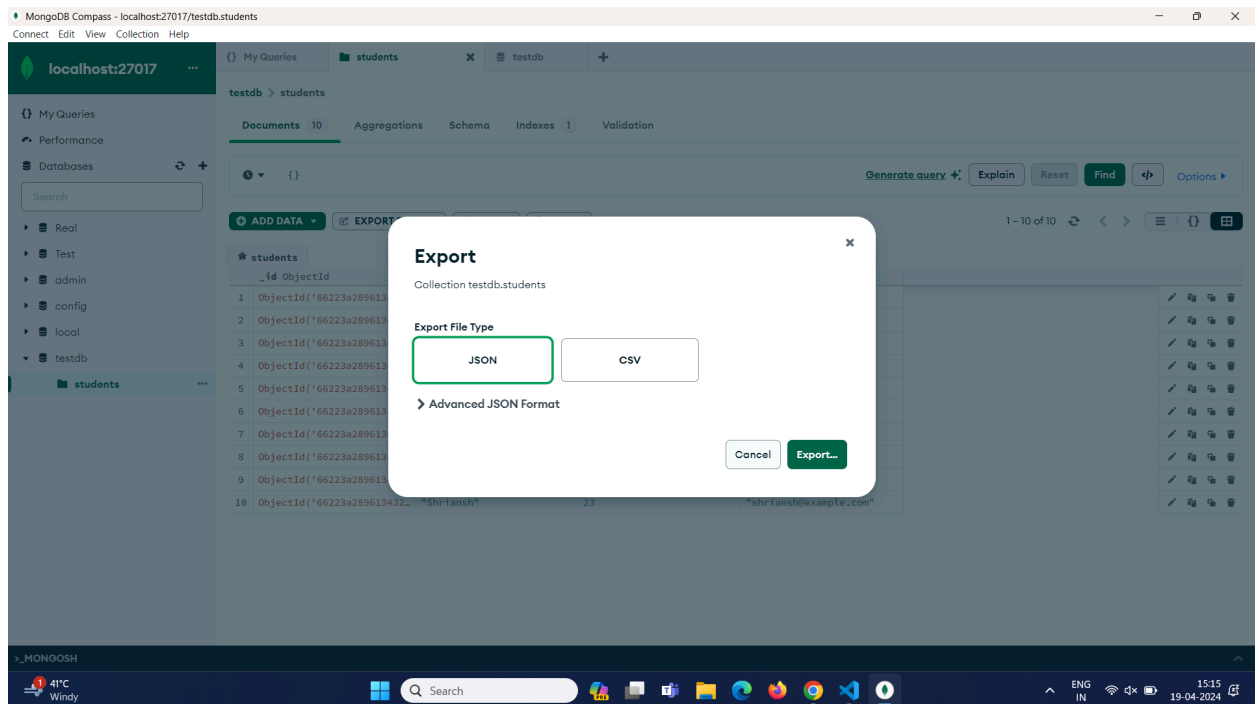
Learn more about aggregation pipeline stages

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9.



10.



export.json

```
[{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbd"
  },
  "name": "Shubham",
  "age": 25,
  "email": "shubham@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbe"
  },
  "name": "Sarthak",
  "age": 23,
  "email": "sarthak@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbf"
  },
  "name": "Aarav",
  "age": 18,
  "email": "aarav@example.com"
}
```

```
,
  "name": "Kuntal",
  "age": 22,
  "email": "kuntal@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbc0"
  },
  "name": "Shikhar",
  "age": 24,
  "email": "shikhar@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbc1"
  },
  "name": "Dhote",
  "age": 22,
  "email": "dhote@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbc2"
  },
  "name": "Saurabh",
  "email": "saurabh@example.com",
  "age": 23
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbc3"
  },
  "name": "Rohit",
  "age": 27,
  "email": "rohit@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdcbbc4"
```

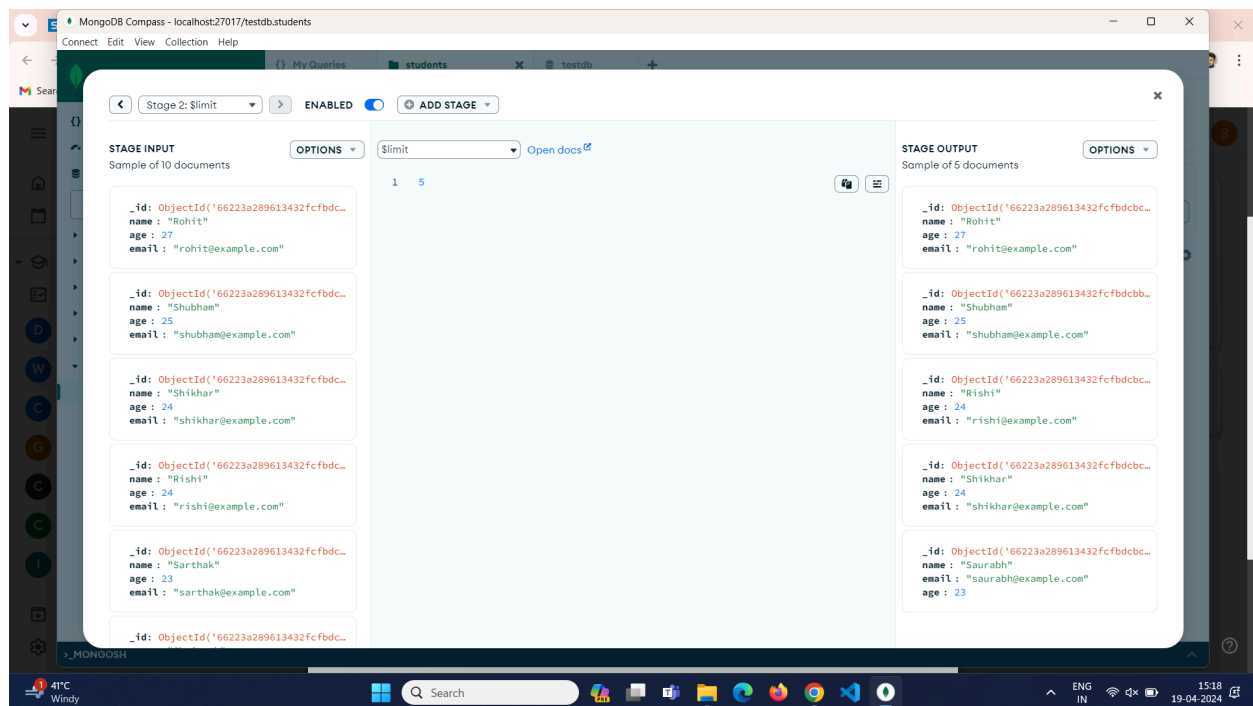


```

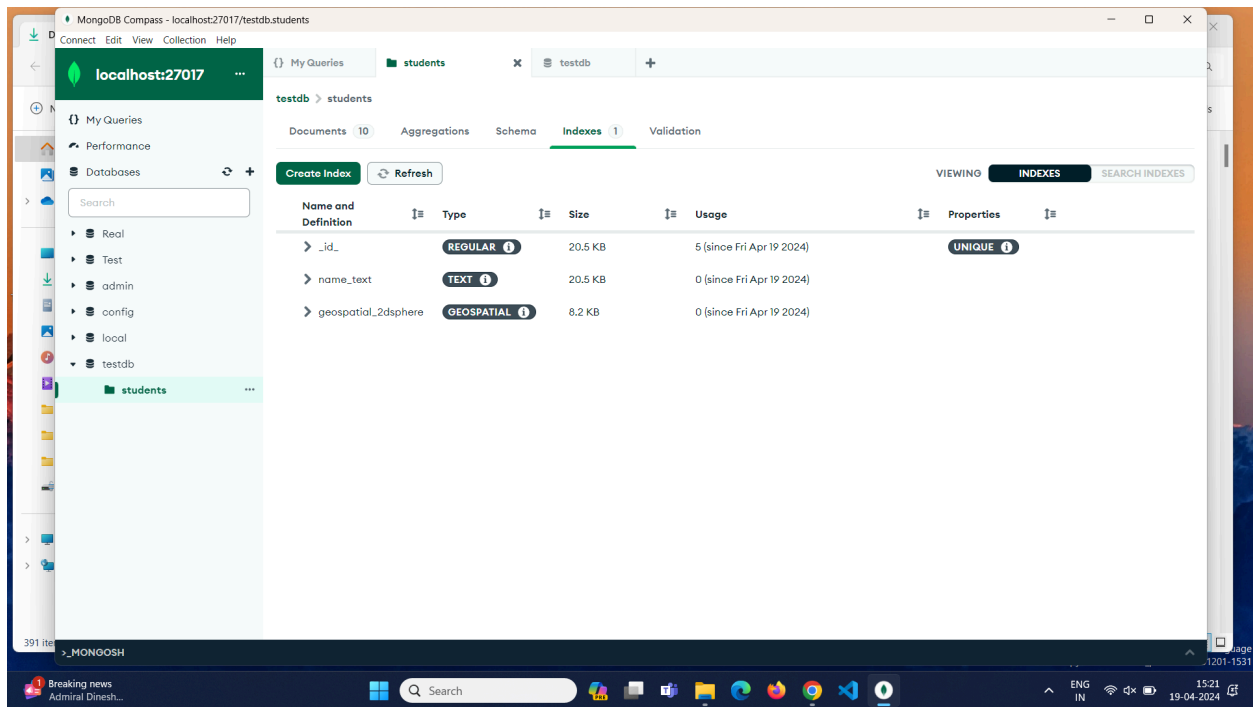
},
  "name": "Rishi",
  "age": 24,
  "email": "rishi@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdc5"
  },
  "name": "Saksham",
  "age": 22,
  "email": "saksham@example.com"
},
{
  "_id": {
    "$oid": "66223a289613432fcfbdc6"
  },
  "name": "Shriansh",
  "age": 23,
  "email": "shriansh@example.com"
}]

```

11.



12.



14.

