WEB ASSIGNMENT

RISHIRAJ

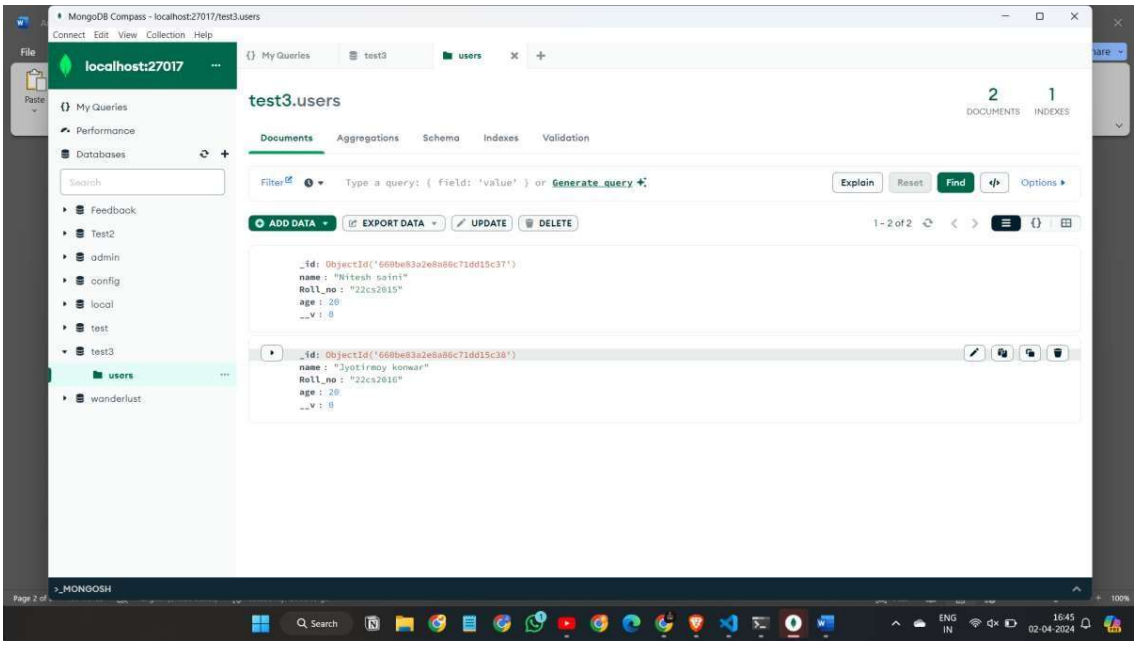
22MC3026

Q1-

```
const mongoose = require( 'mongoose');

async function main(){
await
mongoose. connect('mongodb://127.0.0.1:27017/test3');

main()
.then(()=>{console. log("Connected Succesfully");})
.catch((err)=>{console.error(err);});

const userschema = new mongoose. Schema ({
name: String,
Roll_no:String,
age : Number,

});

const User = mongoose.model("User", userSchema); //
Making the model or we can say making the collection
and giving the template to the collection.

const user1=new User({ // Inserting one by one or
making the documen@for the collection User.
name: "rishiraj
Roll_no: "22mc3026
age: 20
const user2=new User({ // Inserting or making the
document for the collection User.
```

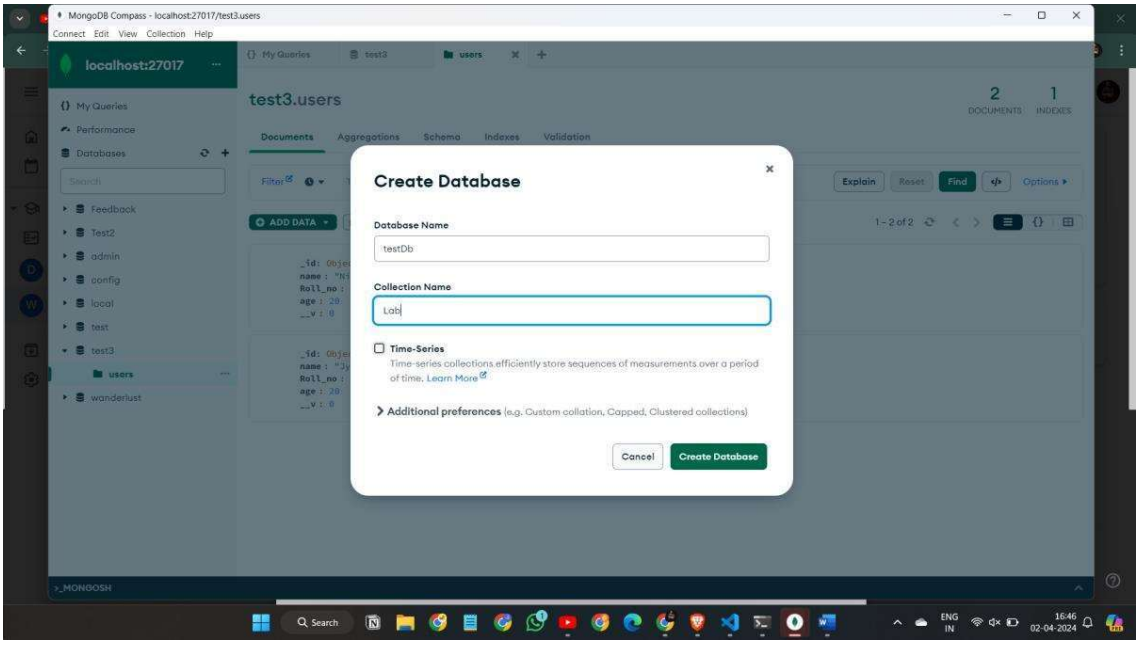
```
name: "rishi",
22mc3025

age: 20

});

user1. save();
user2. save();

});
```

```
const user2=new User({  // Inserting or making the
document for the collection User.
    name: "Jyotirmoy konwar",
    Roll_no:                    22mc
    age: 20
});

user1.save();
user2.save();
```

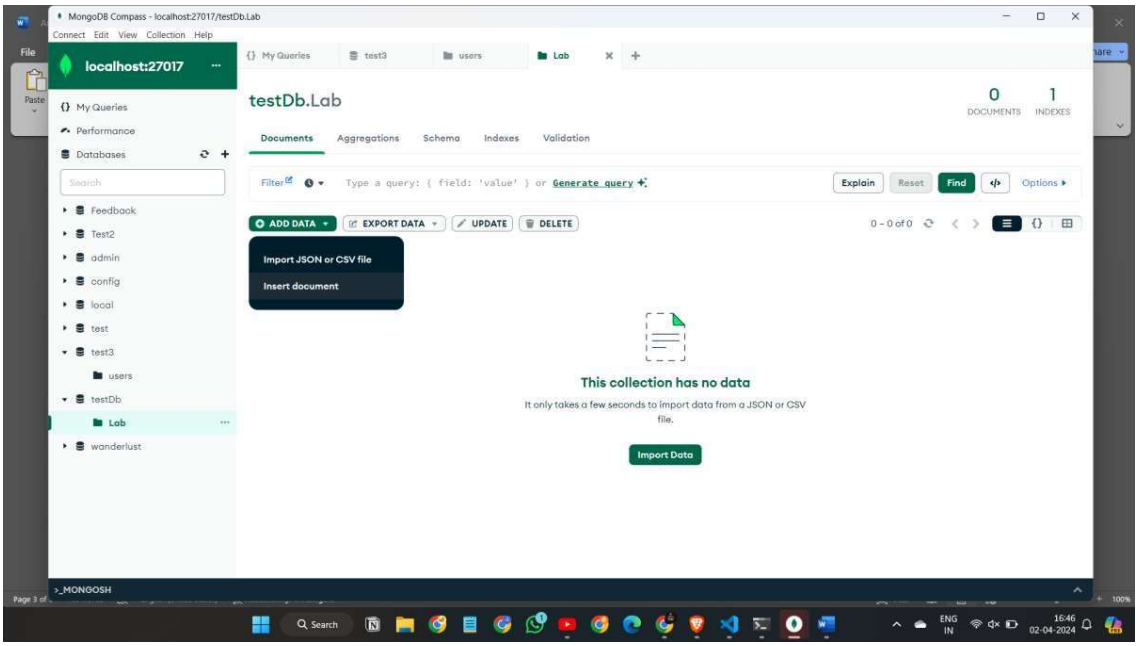


Q-2

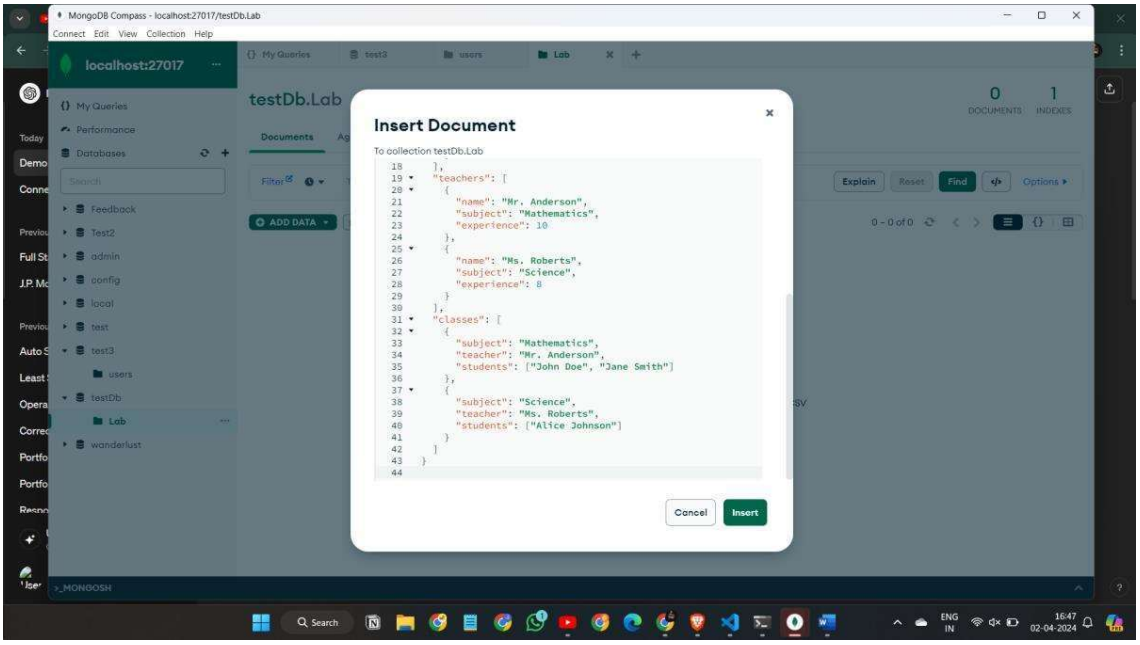
Step -1


MongoDB Compass - localhost:27017/test3.users
Connect Edit View Collection Help
localhost:27017
My Queries
Performance
Databases
Feedback
Test2
admin
config
local
test
test3
users
wanderlust
test3.users
2 DOCUMENTS
1 INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Explain
Reset
Find
Options
ADD DATA
Create Database
Database Name
testDb
Collection Name
Lab
Time-Series
Time-series collections efficiently store sequences of measurements over a period of time. Learn More
Additional preferences (e.g. Custom collation, Capped, Clustered collections)
Cancel
Create Database
>_MONGOSH

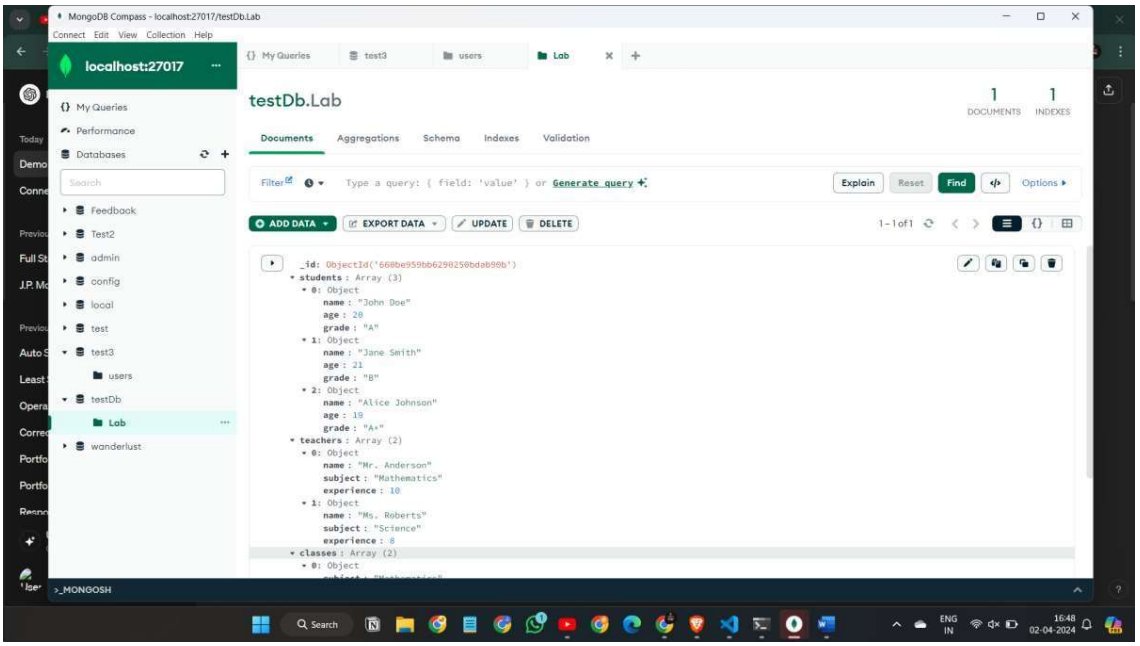
Step-2


MongoDB Compass - localhost:27017/testDb.Lab
Connect Edit View Collection Help
localhost:27017
My Queries
Performance
Databases
Feedback
Test2
admin
config
local
test
test3
users
testDb
Lab
wanderlust
testDb.Lab
0 DOCUMENTS
1 INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Filter
Type a query: { field: 'value' } or Generate query
Explain
Reset
Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
0 - 0 of 0
Import JSON or CSV file
Insert document
This collection has no data
It only takes a few seconds to import data from a JSON or CSV file.
Import Data
>_MONGOSH

Step-3

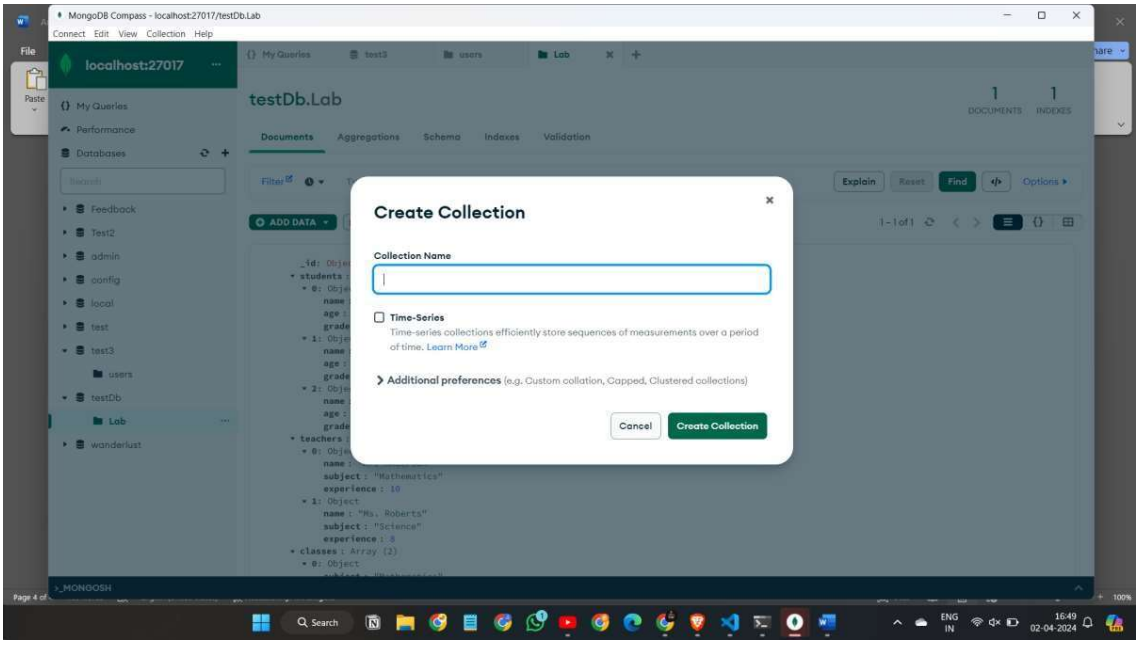


Step-4

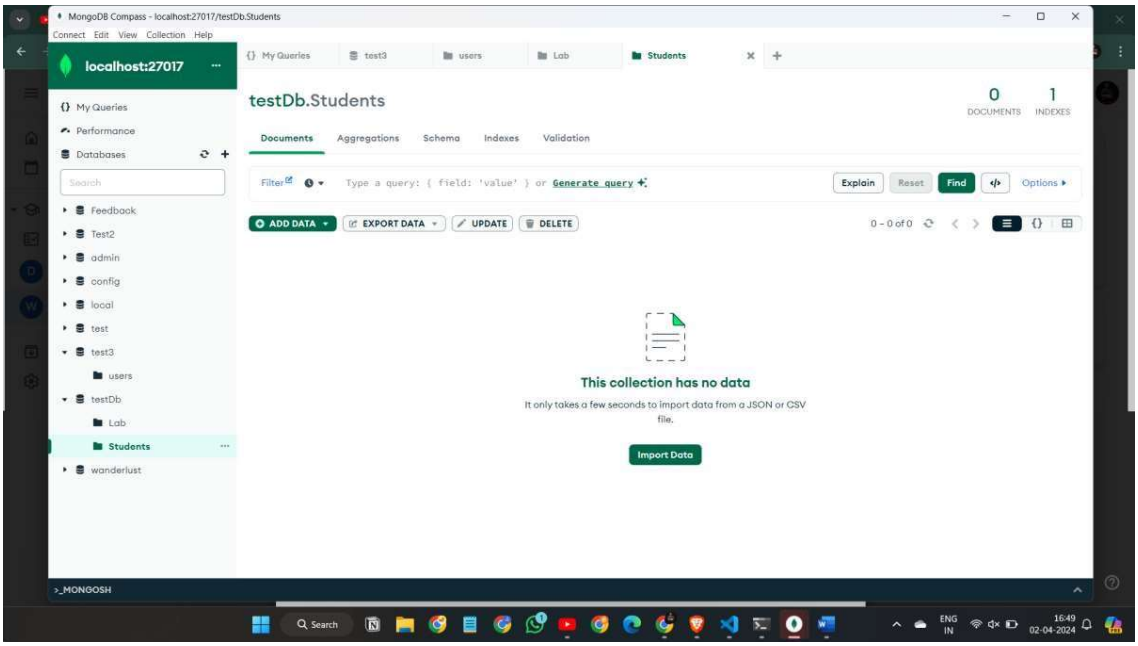


Q-3

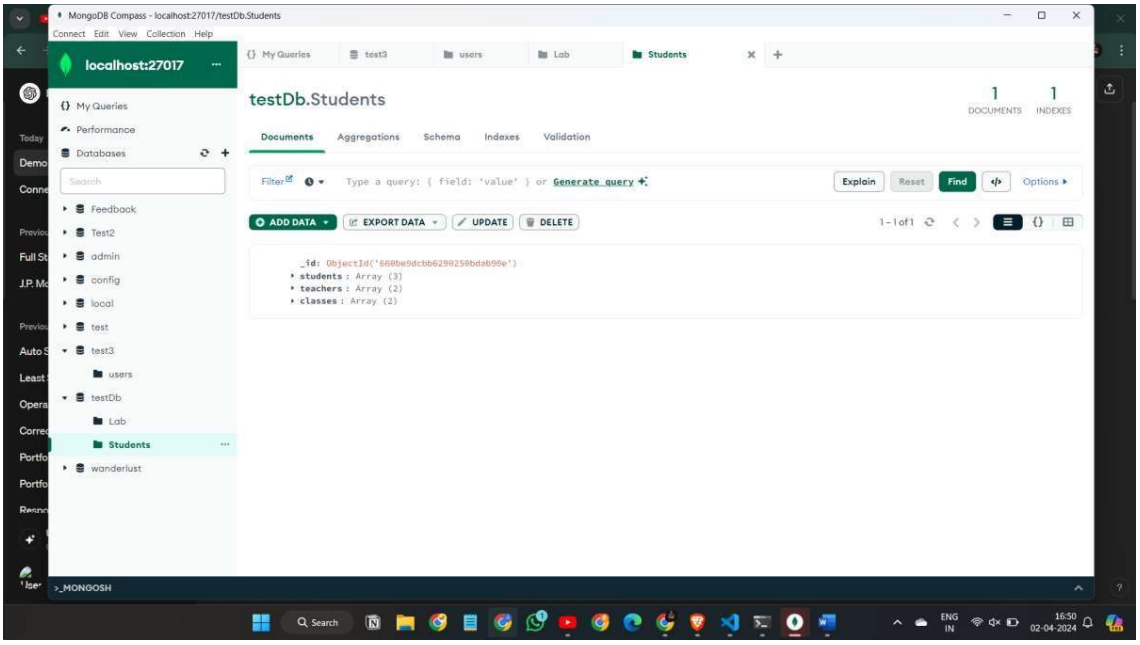
Step-1


MongoDB Compass - localhost:27017/testDb.Lab
localhost:27017
testDb.Lab
Create Collection
Collection Name
Time-Series
Additional preferences
Cancel
Create Collection

Step-2

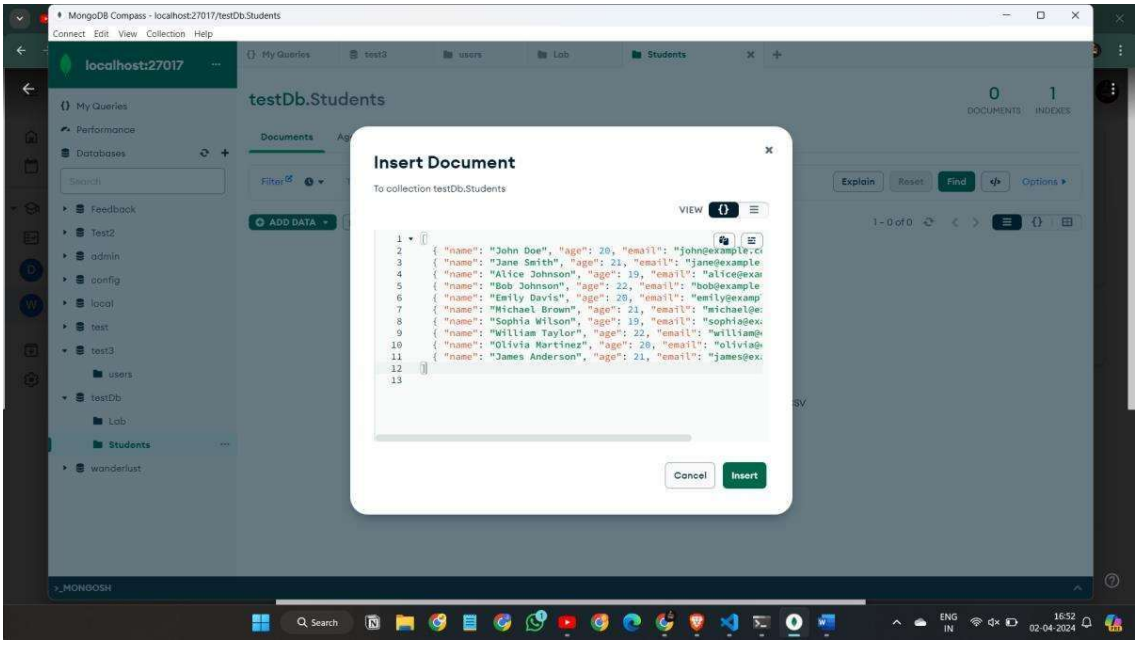

MongoDB Compass - localhost:27017/testDb.Students
localhost:27017
testDb.Students
This collection has no data
It only takes a few seconds to import data from a JSON or CSV file.
Import Data

Step-3

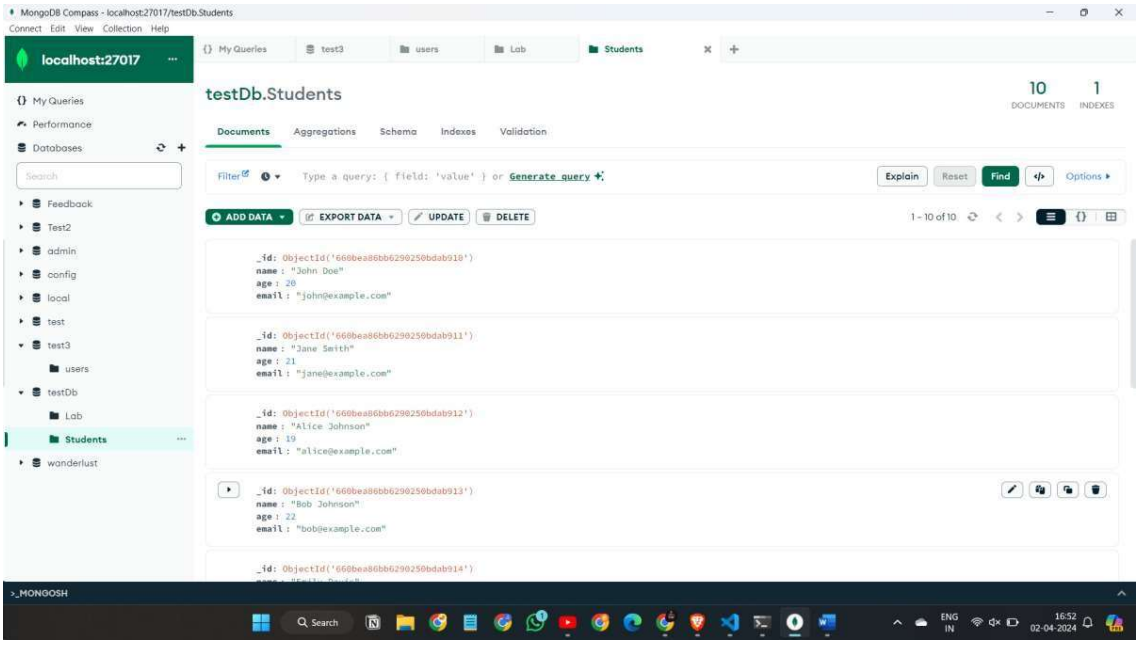

MongoDB Compass - localhost:27017/testDb.Students
localhost:27017
testDb.Students
Documents
Aggregations
Schema
Indexes
Validation
ADD DATA
EXPORT DATA
UPDATE
DELETE
_id: ObjectId('660be9dcbb6290250bdab98e')
students : Array (3)
teachers : Array (2)
classes : Array (2)

Q-4

Step-1

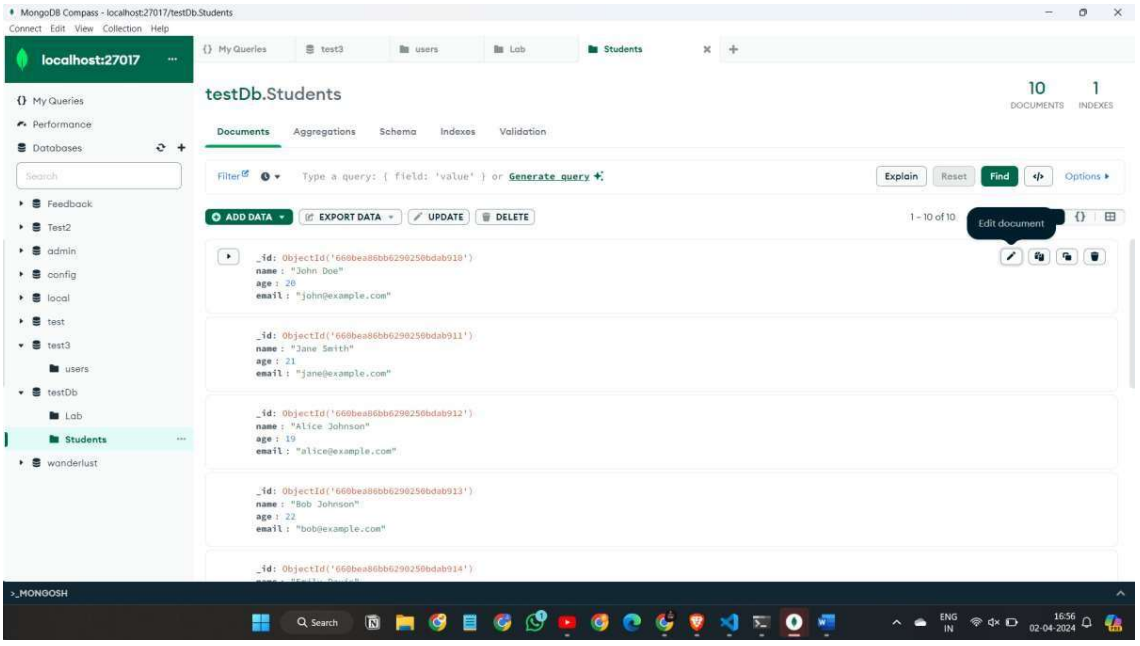

MongoDB Compass - localhost:27017/testDb.Students
localhost:27017
testDb.Students
Insert Document
To collection testDb.Students
VIEW
Cancel
Insert

Q-5

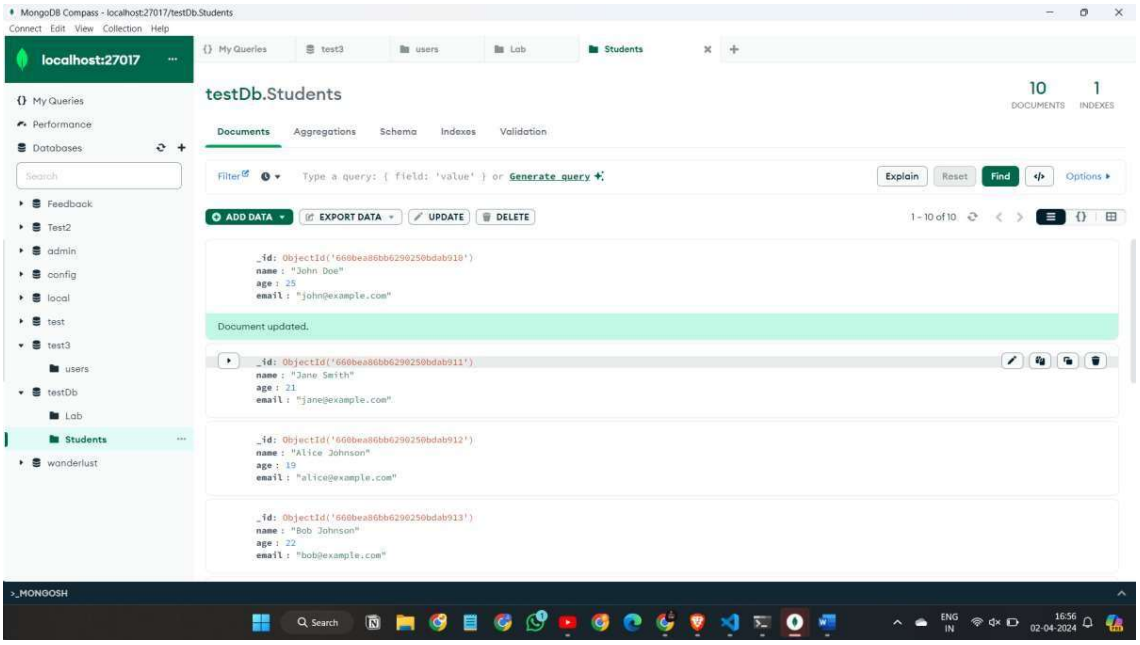


Q-6

Step-1

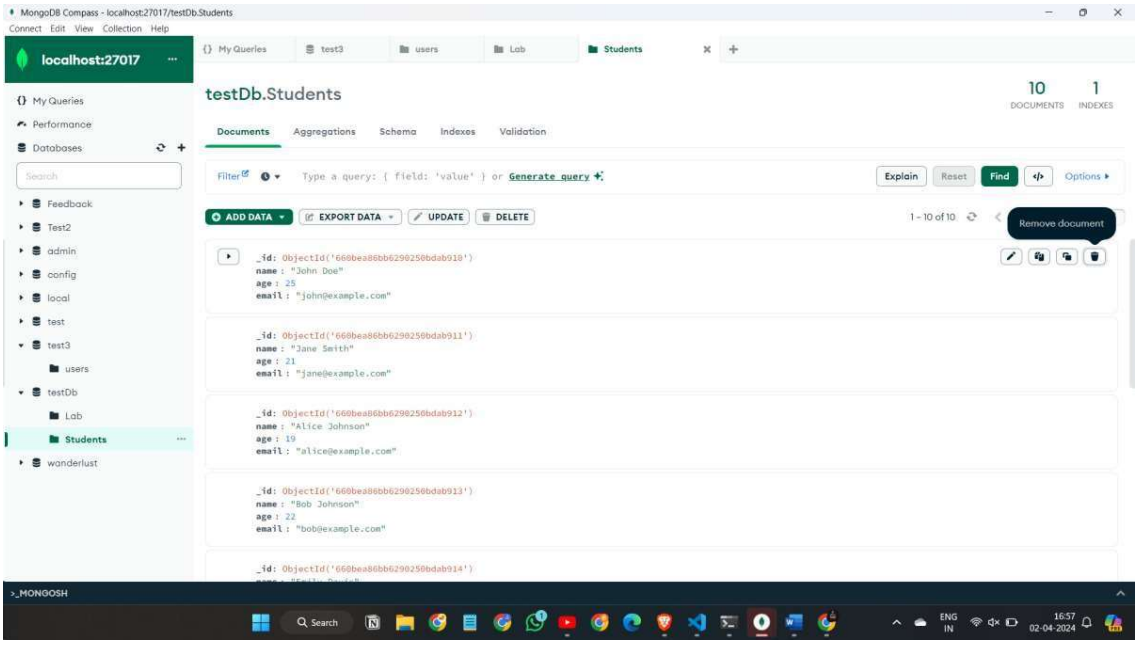


Step-2

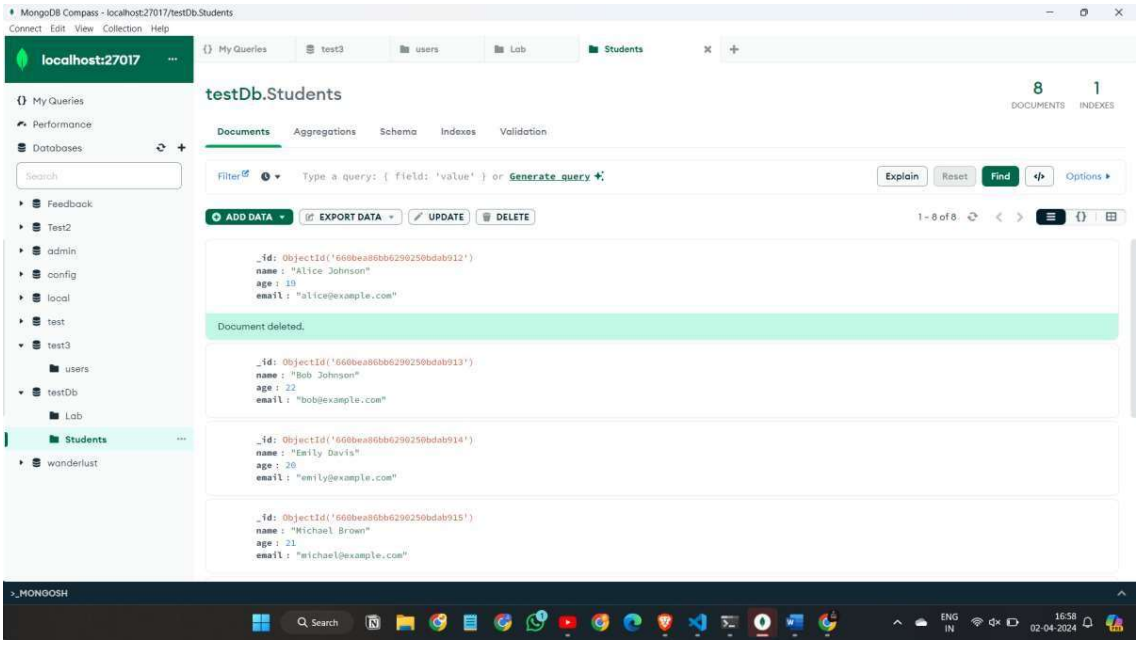


Q-7

Step-1



Step-2


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
My Queries
Performance
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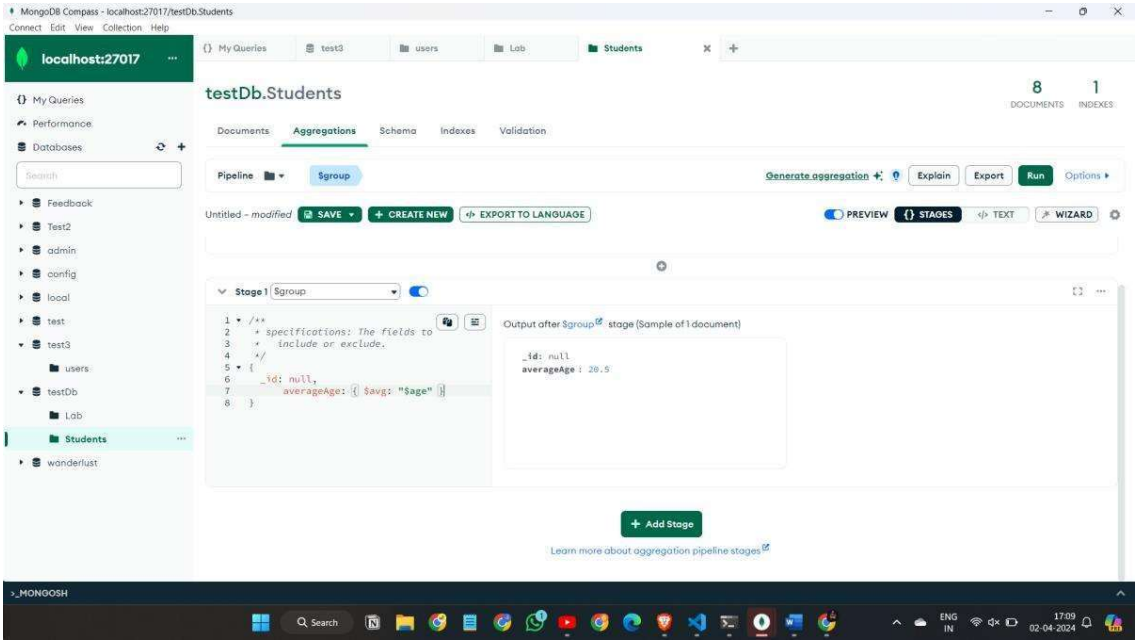
Feedback
Test2
admin
config
local
test
test3
users
testDb
Lab
Students
wanderlust
testDb.Students
8 DOCUMENTS
1 INDEXES
Documents Aggregations Schema Indexes Validation
Filter
Type a query: { field: 'value' } or Generate query
Explain Reset Find Options
ADD DATA EXPORT DATA UPDATE DELETE
1 - 8 of 8
_id: ObjectId('660bea86bb6290250bdab912')
name : "Alice Johnson"
age : 19
email : "alice@example.com"
Document deleted.
_id: ObjectId('660bea86bb6290250bdab913')
name : "Bob Johnson"
age : 22
email : "bob@example.com"
_id: ObjectId('660bea86bb6290250bdab914')
name : "Emily Davis"
age : 20
email : "emily@example.com"
_id: ObjectId('660bea86bb6290250bdab915')
name : "Michael Brown"
age : 21
email : "michael@example.com"
>_MONGOSH
Search
ENG IN
16:58
02-04-2024

Q-8


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
My Queries
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Test2
admin
config
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testDb
Lab
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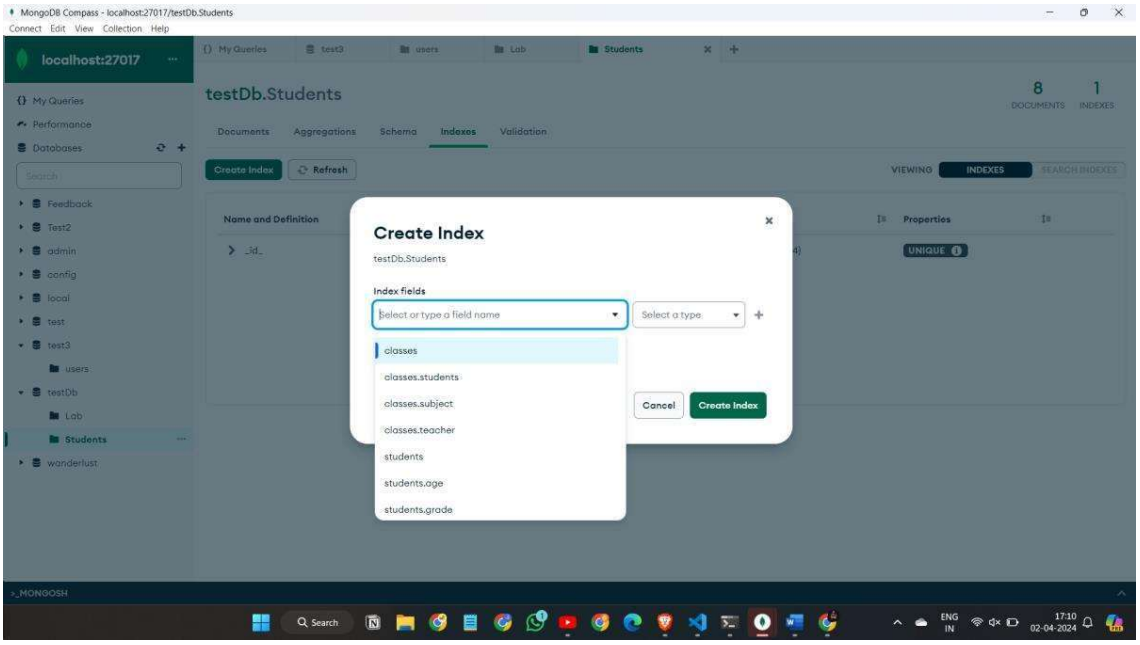
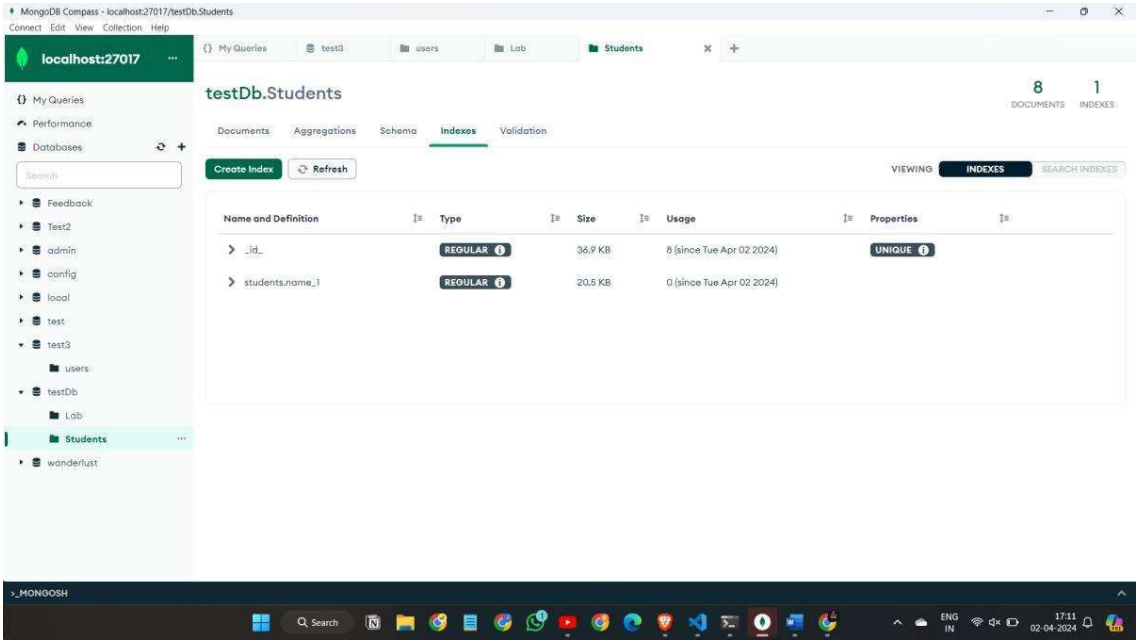
wanderlust
testDb.Students
8 DOCUMENTS
1 INDEXES
Documents Aggregations Schema Indexes Validation
Pipeline $group
Generate aggregation Explain Export Run Options
Untitled - modified SAVE CREATE NEW EXPORT TO LANGUAGE
PREVIEW STAGES TEXT WIZARD
Stage 1 $group
/**
* specifications: The fields to
* include or exclude.
*/
{
_id: null,
averageAge: { $avg: "$age" }
}
Output after $group stage (Sample of 1 document)
_id: null
averageAge : 20.5
Add Stage
Learn more about aggregation pipeline stages
>_MONGOSH
Search
ENG IN
17:09
02-04-2024

Q-9

Step-1

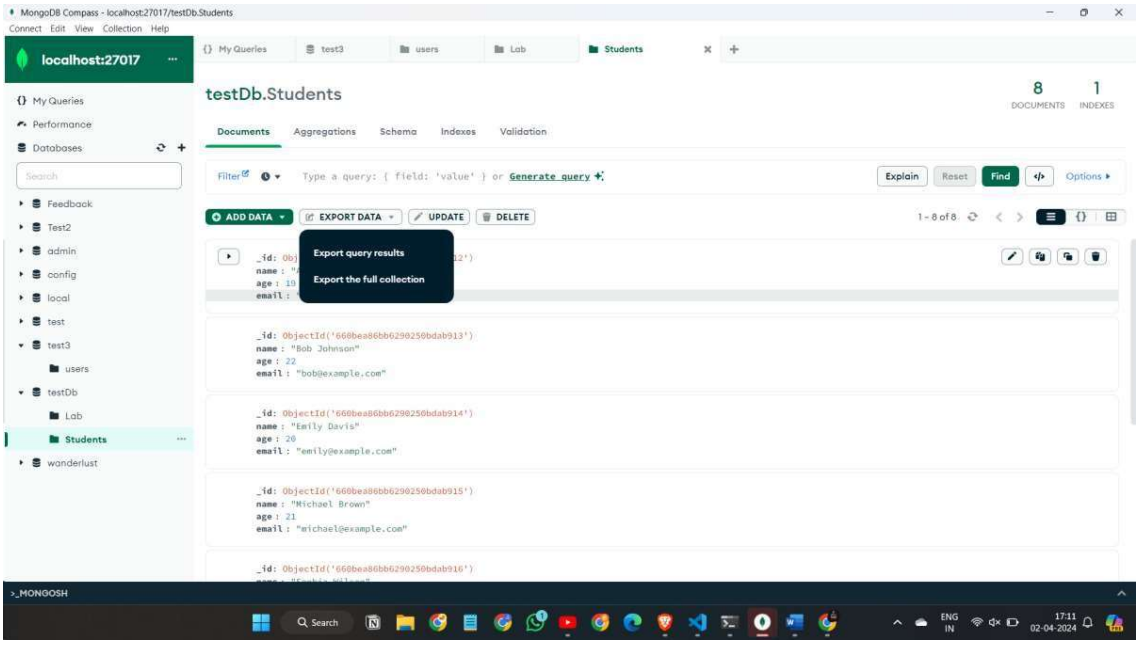


Step-2



Q-10

Step-1


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
My Queries
Performance
Databases
Feedback
Test2
admin
config
local
test
test3
users
testDb
Lab
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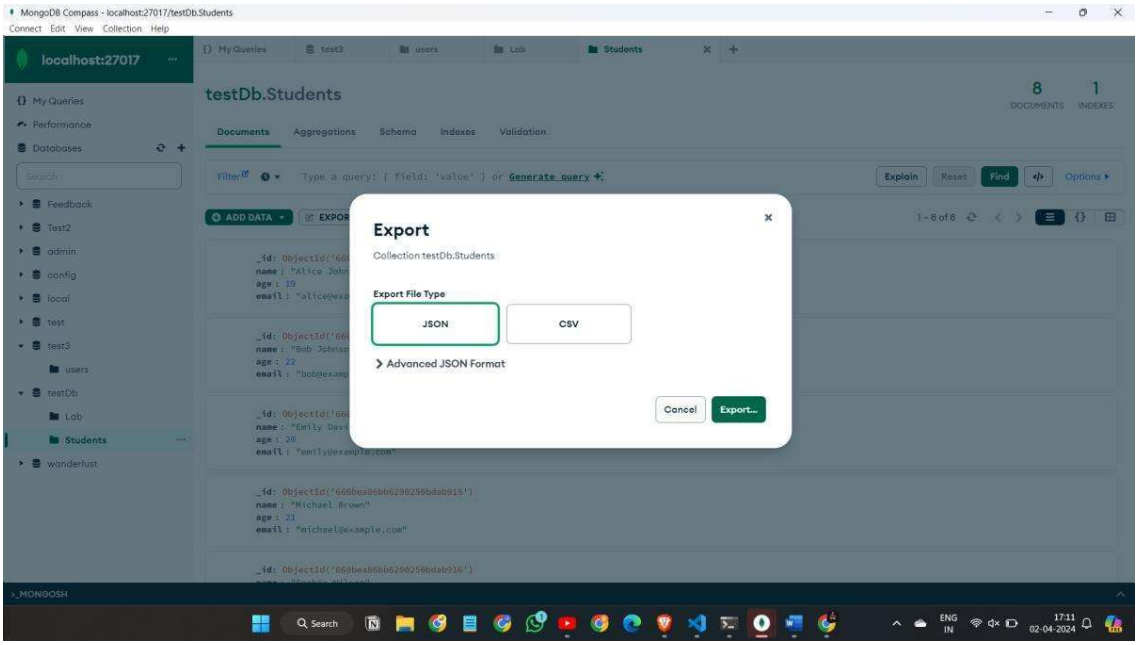
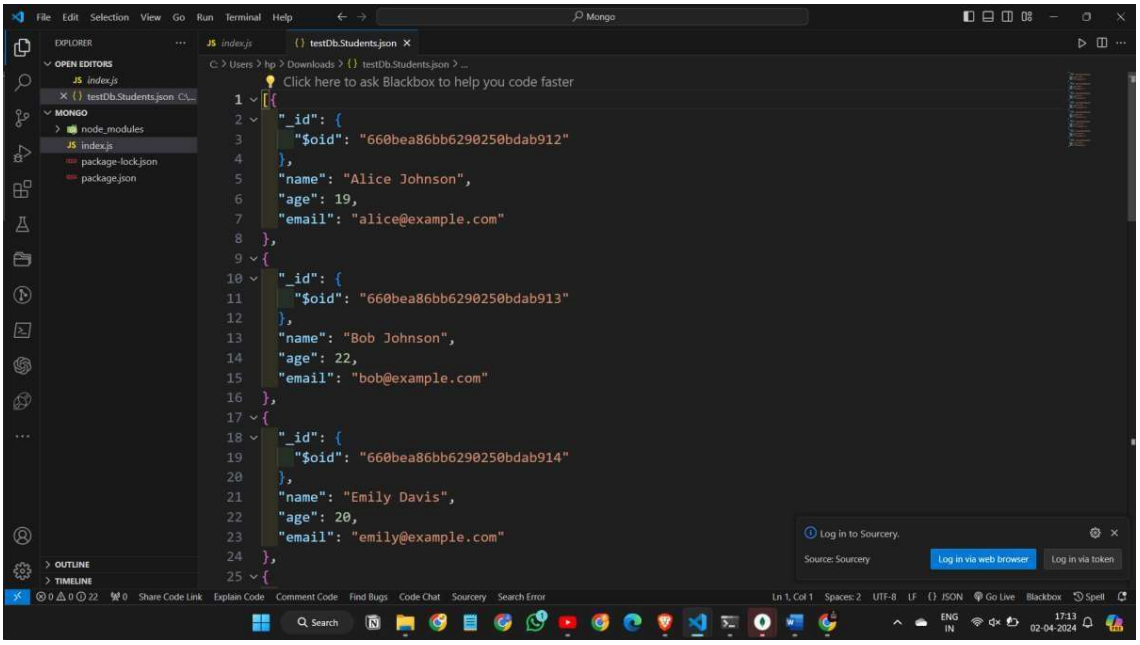
wanderlust
testDb.Students
8 DOCUMENTS
1 INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Explain
Reset
Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
Export query results
Export the full collection
_id: ObjectId('660bea86bb6290250bdab913')
name : "Bob Johnson"
age : 22
email : "bob@example.com"
_id: ObjectId('660bea86bb6290250bdab914')
name : "Emily Davis"
age : 20
email : "emily@example.com"
_id: ObjectId('660bea86bb6290250bdab915')
name : "Michael Brown"
age : 21
email : "michael@example.com"
>_MONGOSH
Search
ENG
IN
17:11
02-04-2024

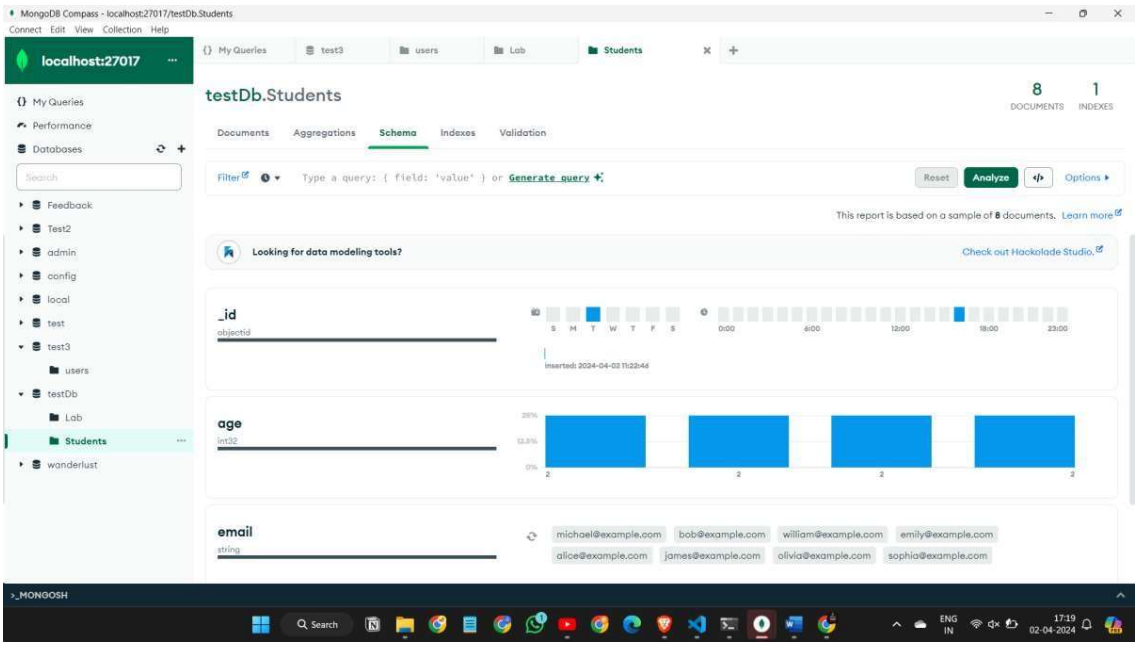
Step-2


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
testDb.Students
8 DOCUMENTS
1 INDEXES
Export
Collection testDb.Students
Export File Type
JSON
CSV
Advanced JSON Format
Cancel
Export...
>_MONGOSH
Search
ENG
IN
17:11
02-04-2024

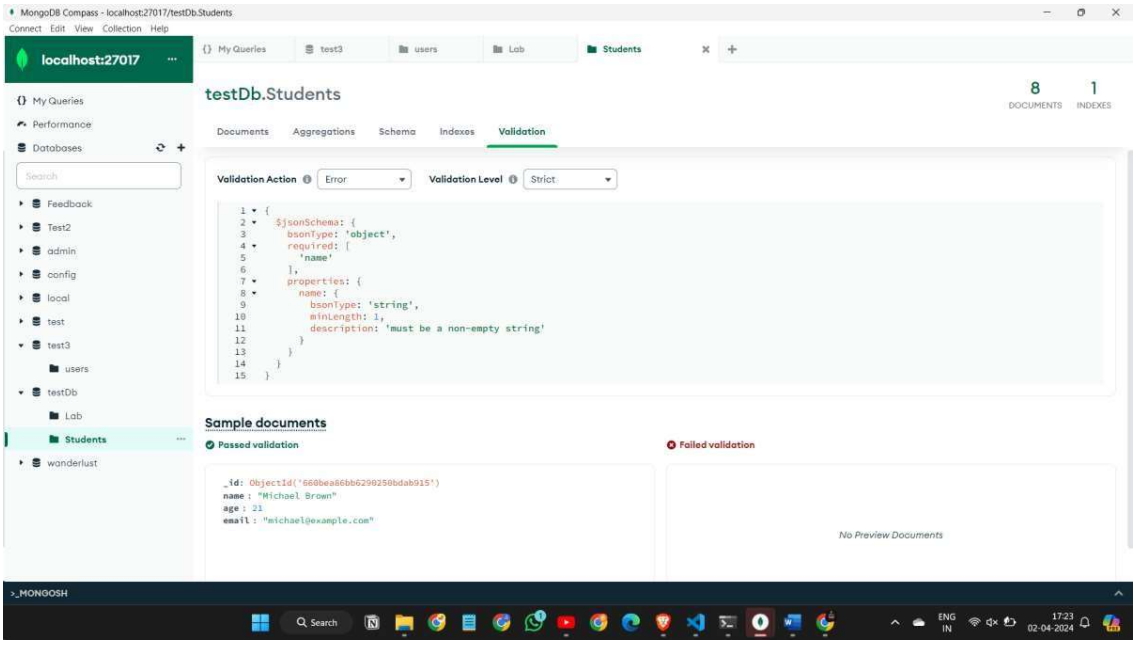
Step-3


File Edit Selection View Go Run Terminal Help
Mongo
EXPLORER
OPEN EDITORS
index.js
testDb.Students.json
MONGO
node_modules
index.js
package-lock.json
package.json
Click here to ask Blackbox to help you code faster
[{
"_id": {
"$oid": "660bea86bb6290250bdab912"
},
"name": "Alice Johnson",
"age": 19,
"email": "alice@example.com"
},
{
"_id": {
"$oid": "660bea86bb6290250bdab913"
},
"name": "Bob Johnson",
"age": 22,
"email": "bob@example.com"
},
{
"_id": {
"$oid": "660bea86bb6290250bdab914"
},
"name": "Emily Davis",
"age": 20,
"email": "emily@example.com"
},
{
Log in to Sourcery.
Source: Sourcery
Log in via web browser
Log in via token
OUTLINE
TIMELINE
Share Code Link
Explain Code
Comment Code
Find Bugs
Code Chat
Sourcery
Search Error
Search
ENG
IN
17:13
02-04-2024

Q-13


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
My Queries
Performance
Databases
Feedback
Test2
admin
config
local
test
test3
users
testDb
Lab
Students
wanderlust
My Queries
test3
users
Lab
Students
testDb.Students
8
DOCUMENTS
1
INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Filter
Type a query: { field: 'value' } or Generate query
Reset
Analyze
Options
This report is based on a sample of 8 documents. Learn more
Looking for data modeling tools?
Check out Hackolade Studio.
_id
objectid
age
int32
email
string
michael@example.com
bob@example.com
william@example.com
emily@example.com
alice@example.com
james@example.com
olivia@example.com
sophia@example.com
>_MONGOSH
Search
ENG
IN
17:19
02-04-2024

Q-14


MongoDB Compass - localhost:27017/testDb.Students
Connect Edit View Collection Help
localhost:27017
My Queries
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Databases
Search
Feedback
Test2
admin
config
local
test
test3
users
testDb
Lab
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wanderlust
My Queries
test3
users
Lab
Students
testDb.Students
8 DOCUMENTS
1 INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Validation Action
Error
Validation Level
Strict
{
$jsonSchema: {
bsonType: 'object',
required: [
'name'
],
properties: {
name: {
bsonType: 'string',
minLength: 1,
description: 'must be a non-empty string'
}
}
}
}
Sample documents
Passed validation
Failed validation
_id: ObjectId('660bea86bb6290250bdab915')
name : "Michael Brown"
age : 21
email : "michael@example.com"
No Preview Documents
>_MONGOSH
Search
ENG
IN
17:23
02-04-2024