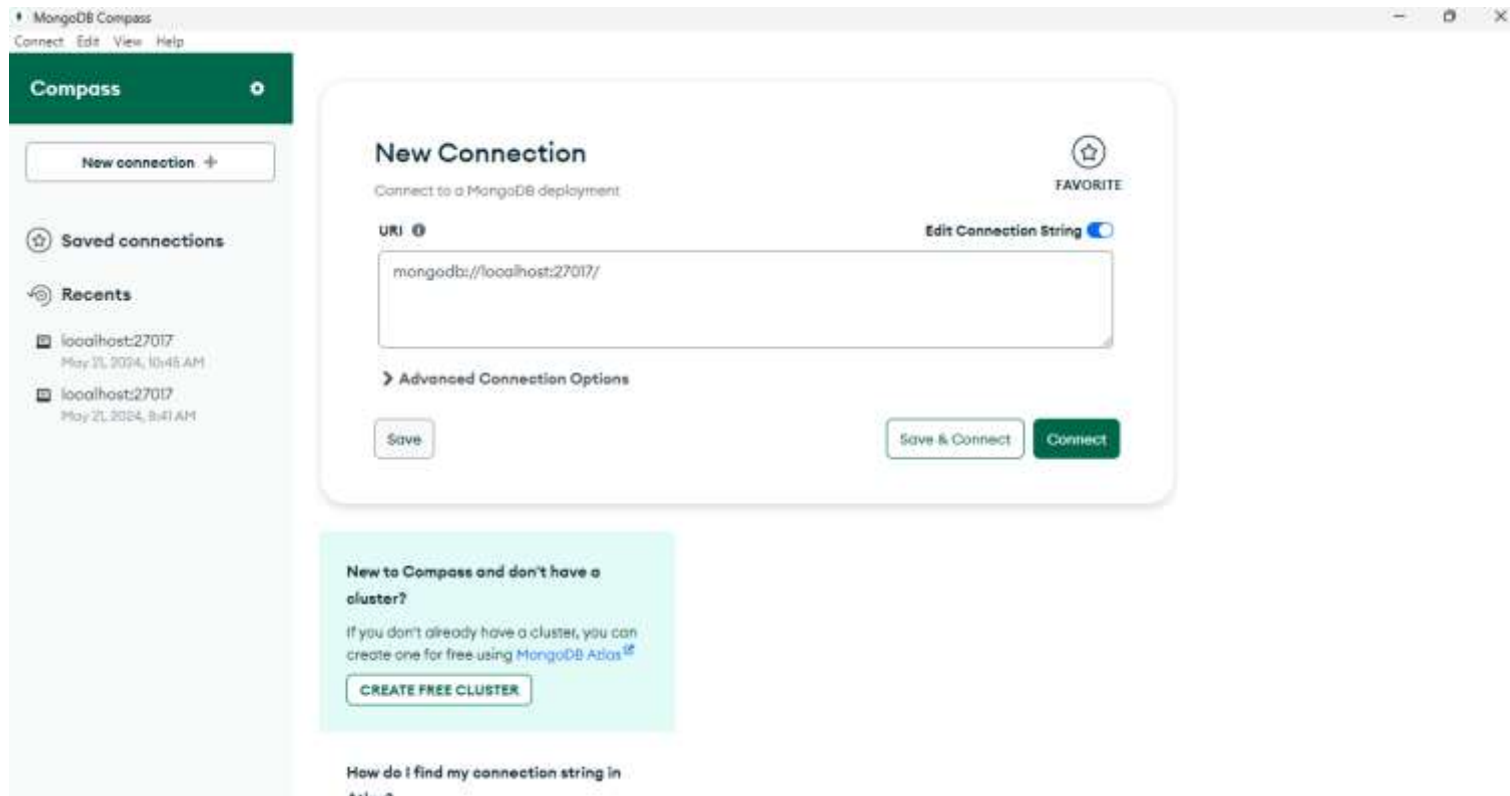
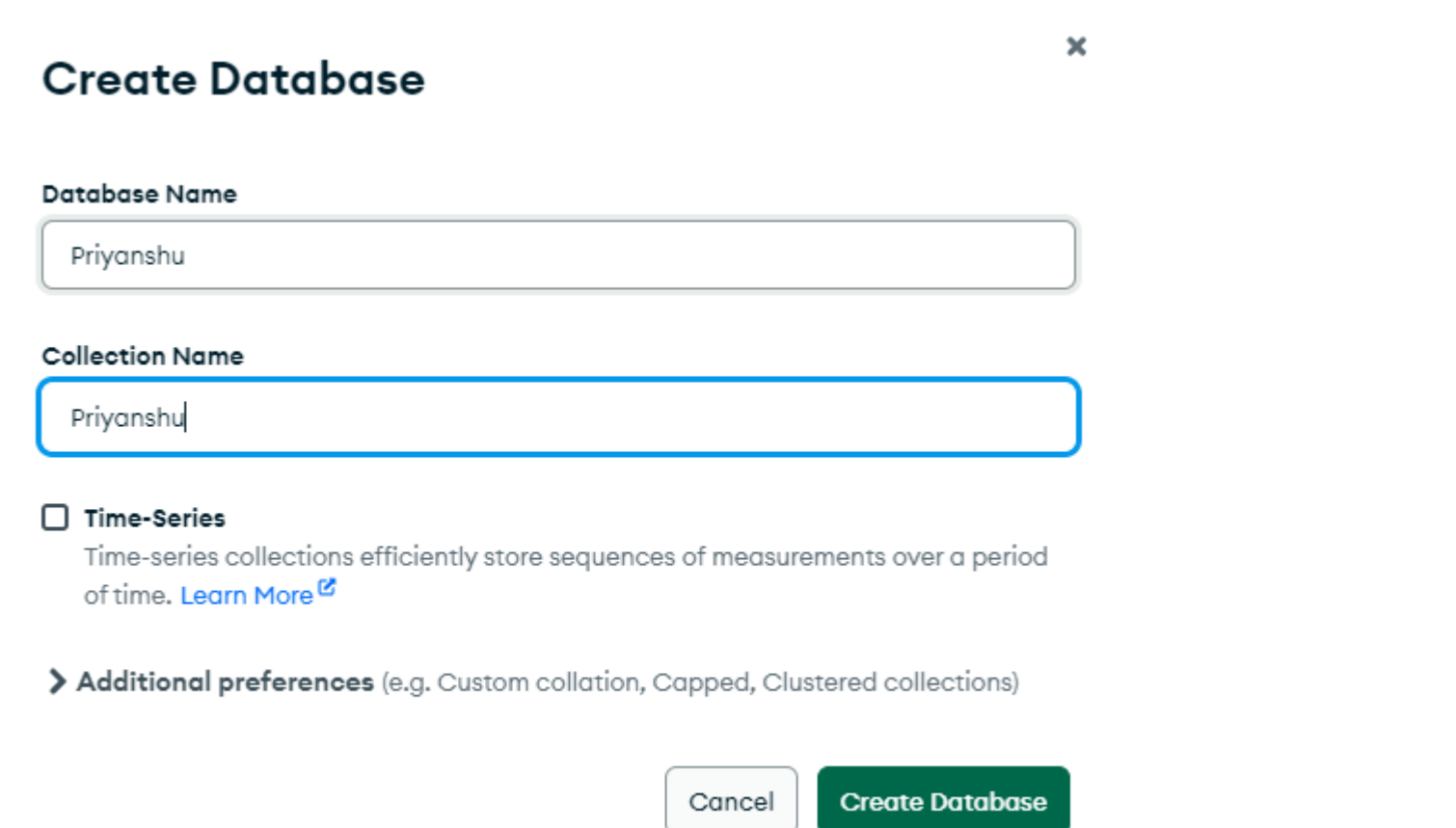


Mongo DB Implementation

Connection to localhost by creating Connection

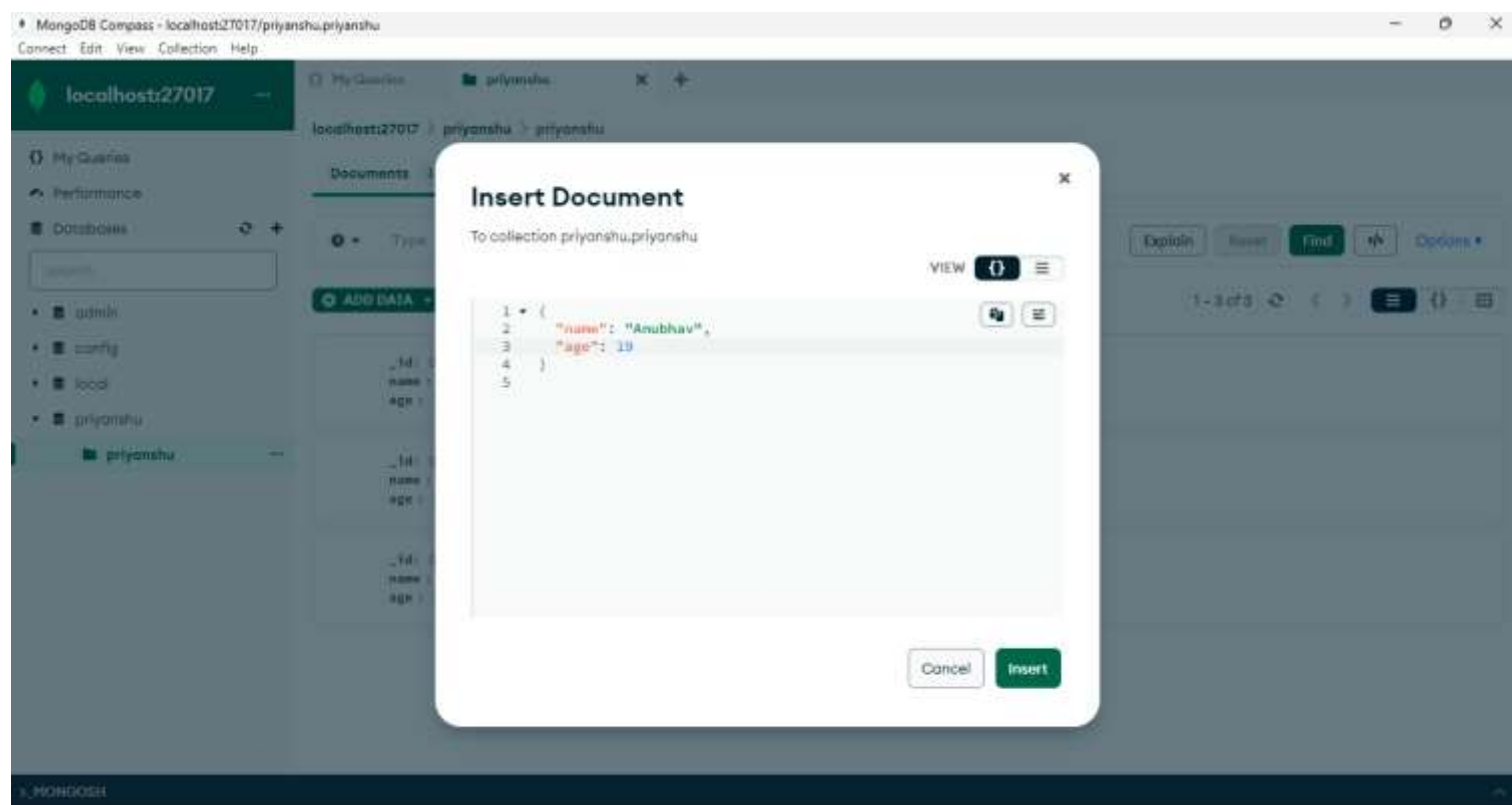


Database creation

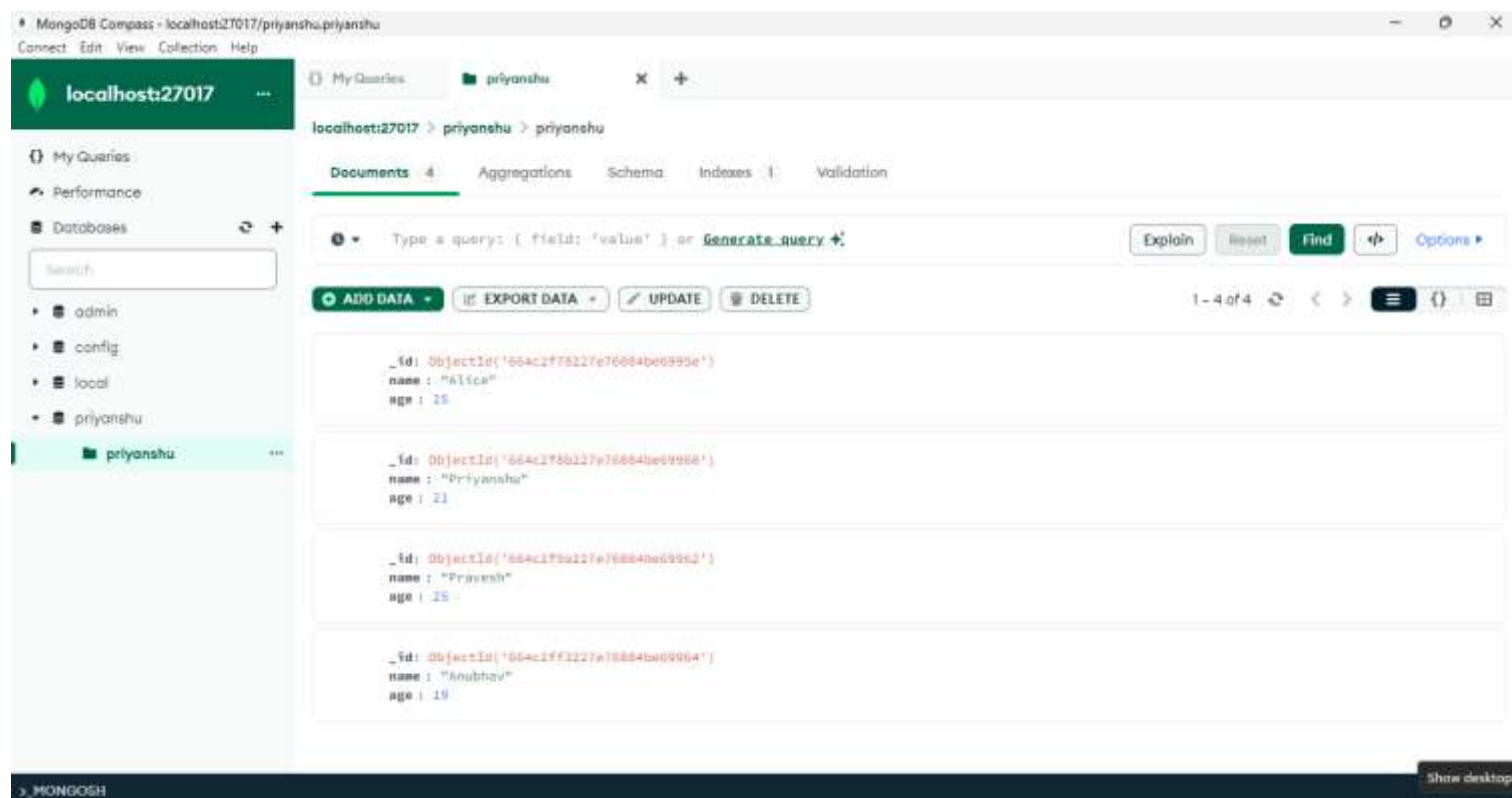


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Inserting data:

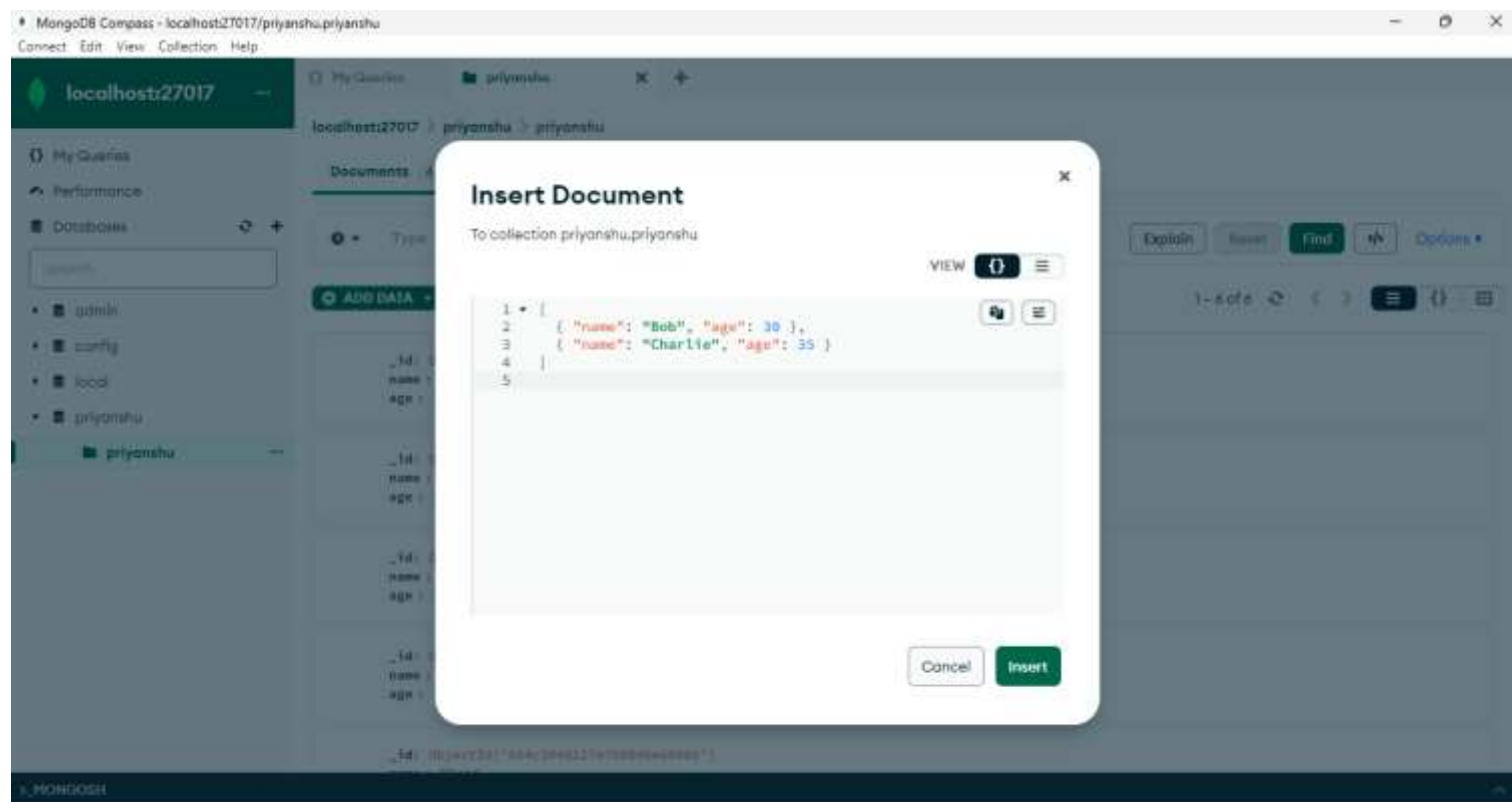


Data after insertion



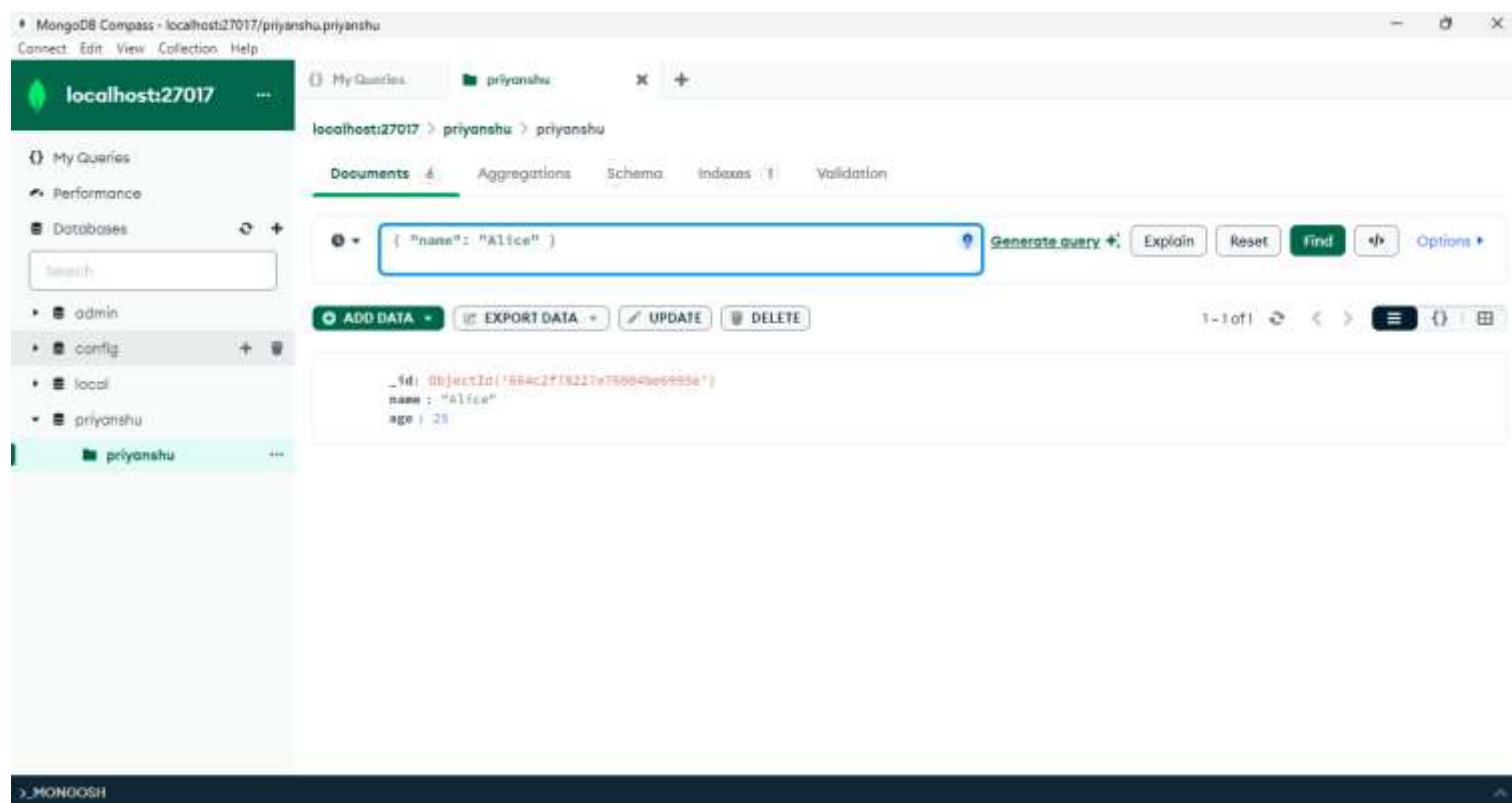
Priyanshu Dhyani

To insert multiple data at a time:



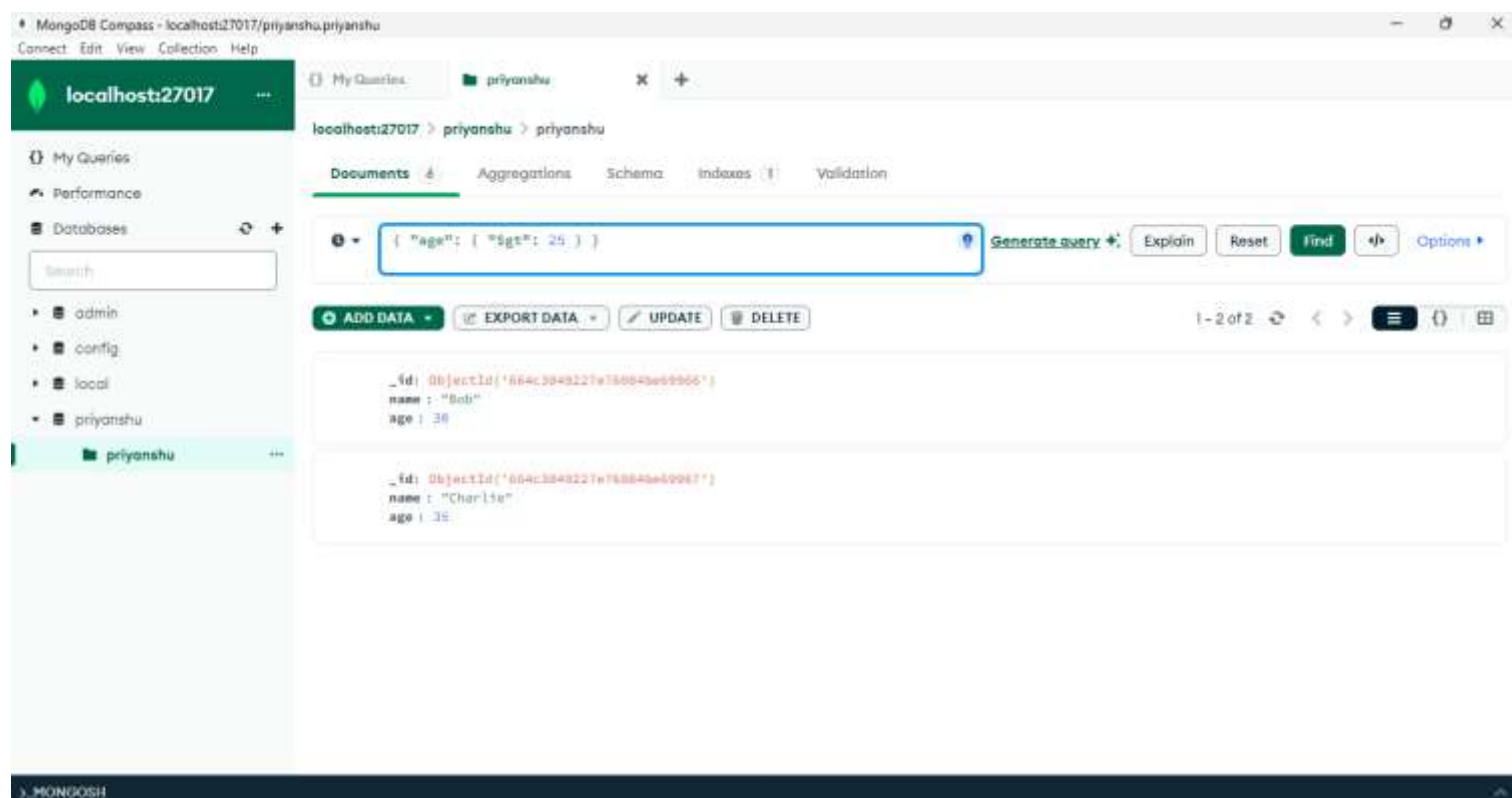
Read Documents

1. Finding one document at a time



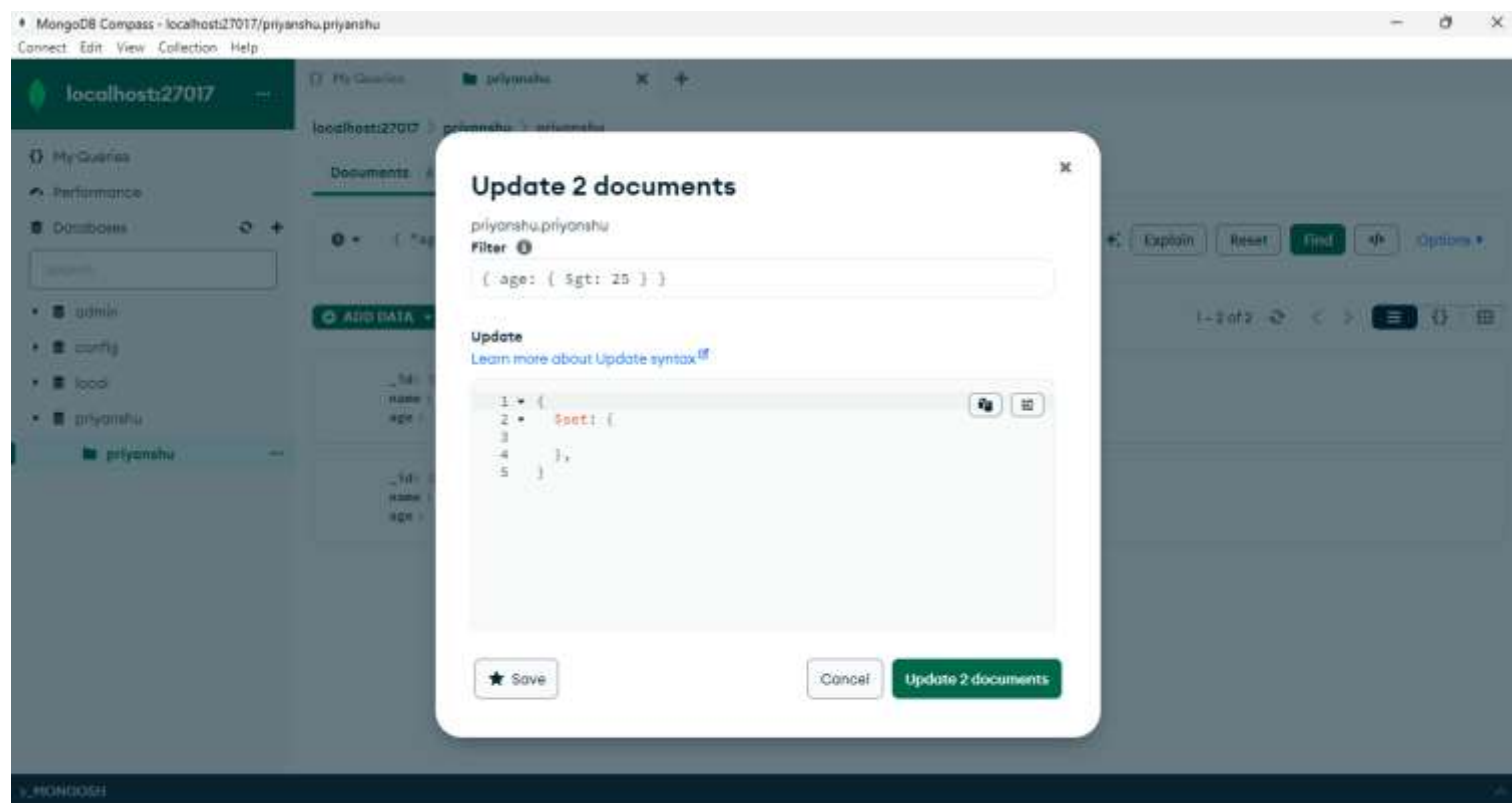
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1. Finding multiple document at a time



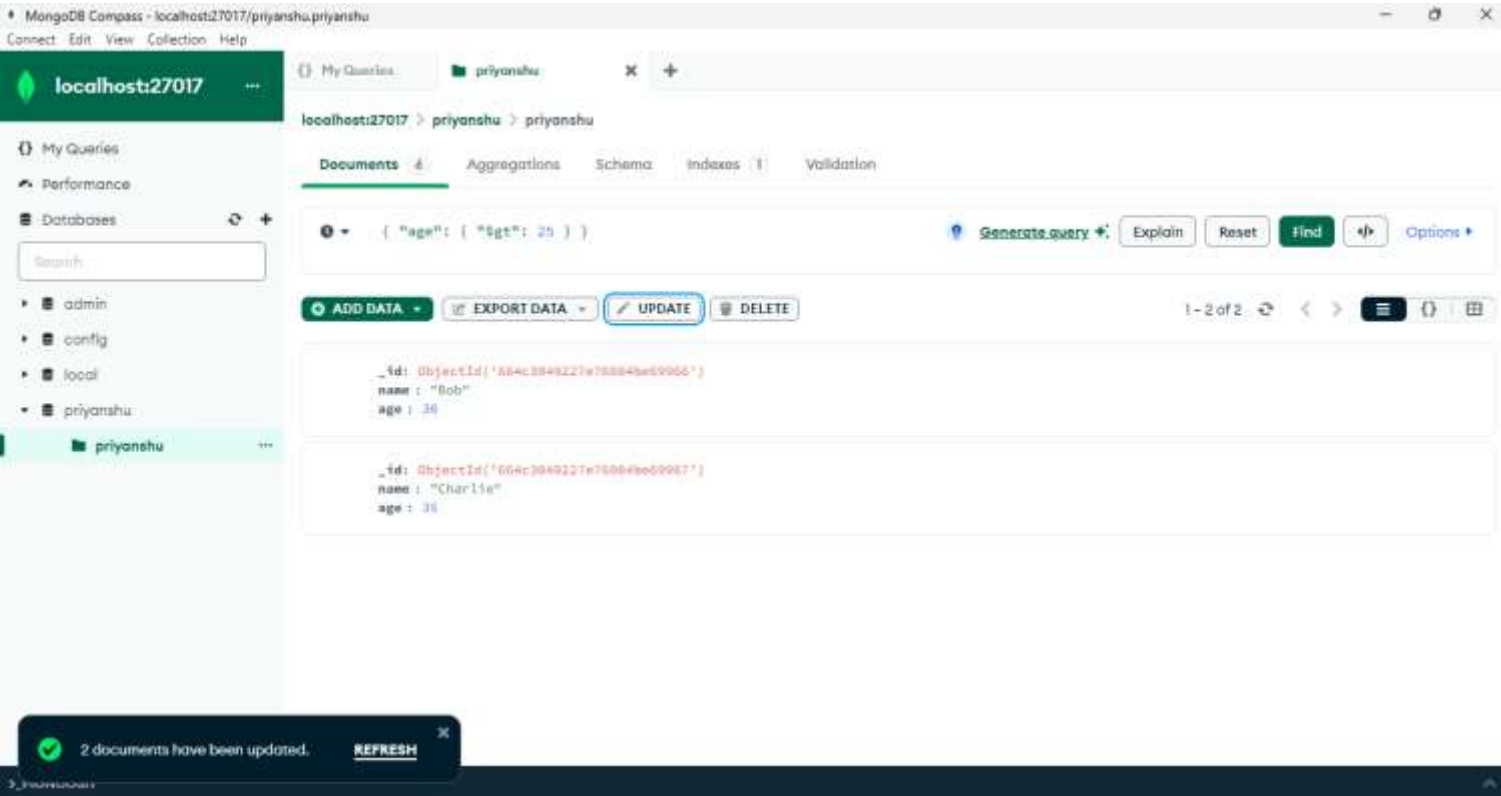
Update Documents

Update Multiple documents at a time



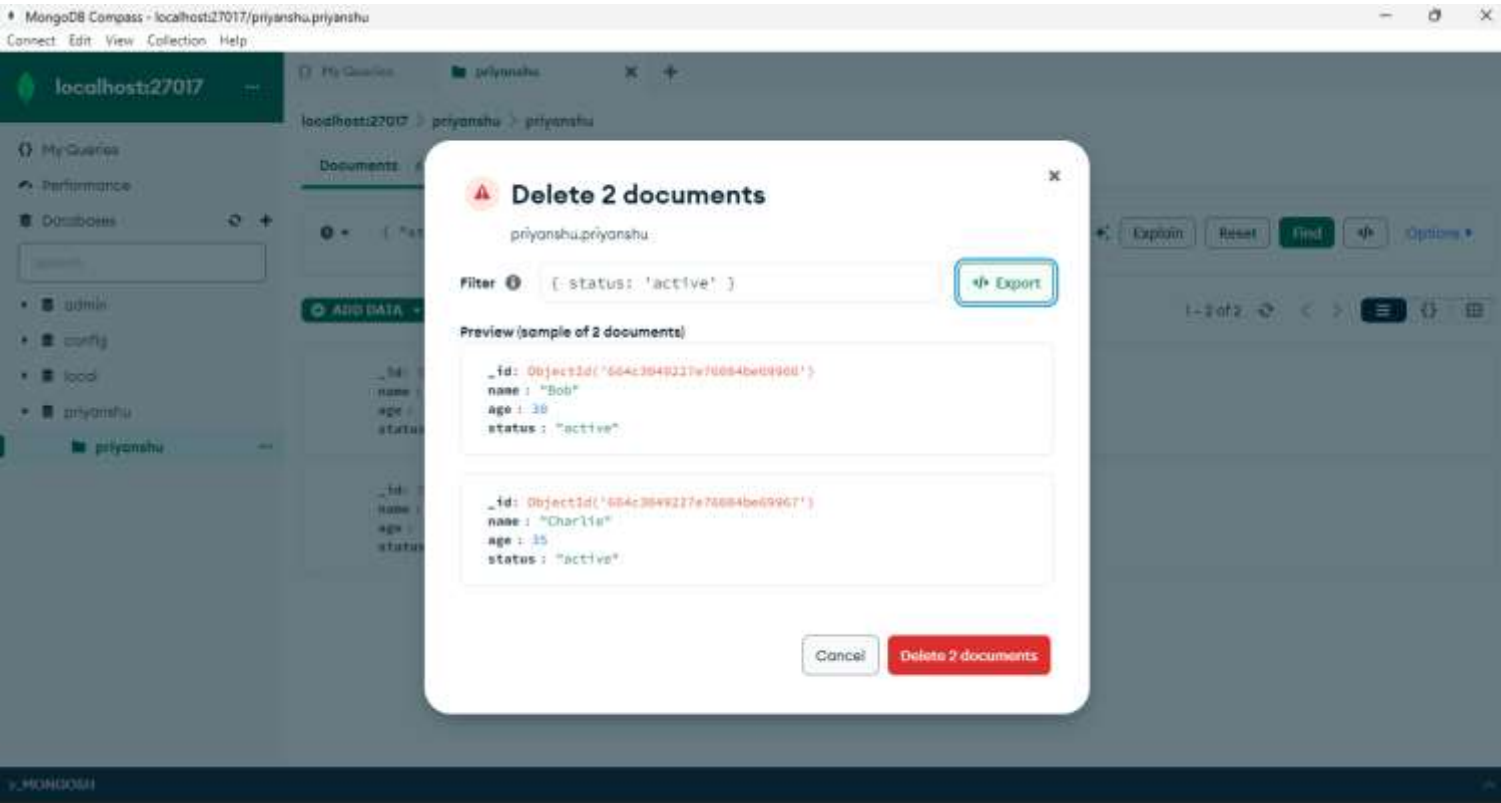
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Result of updated documents



Delete documents

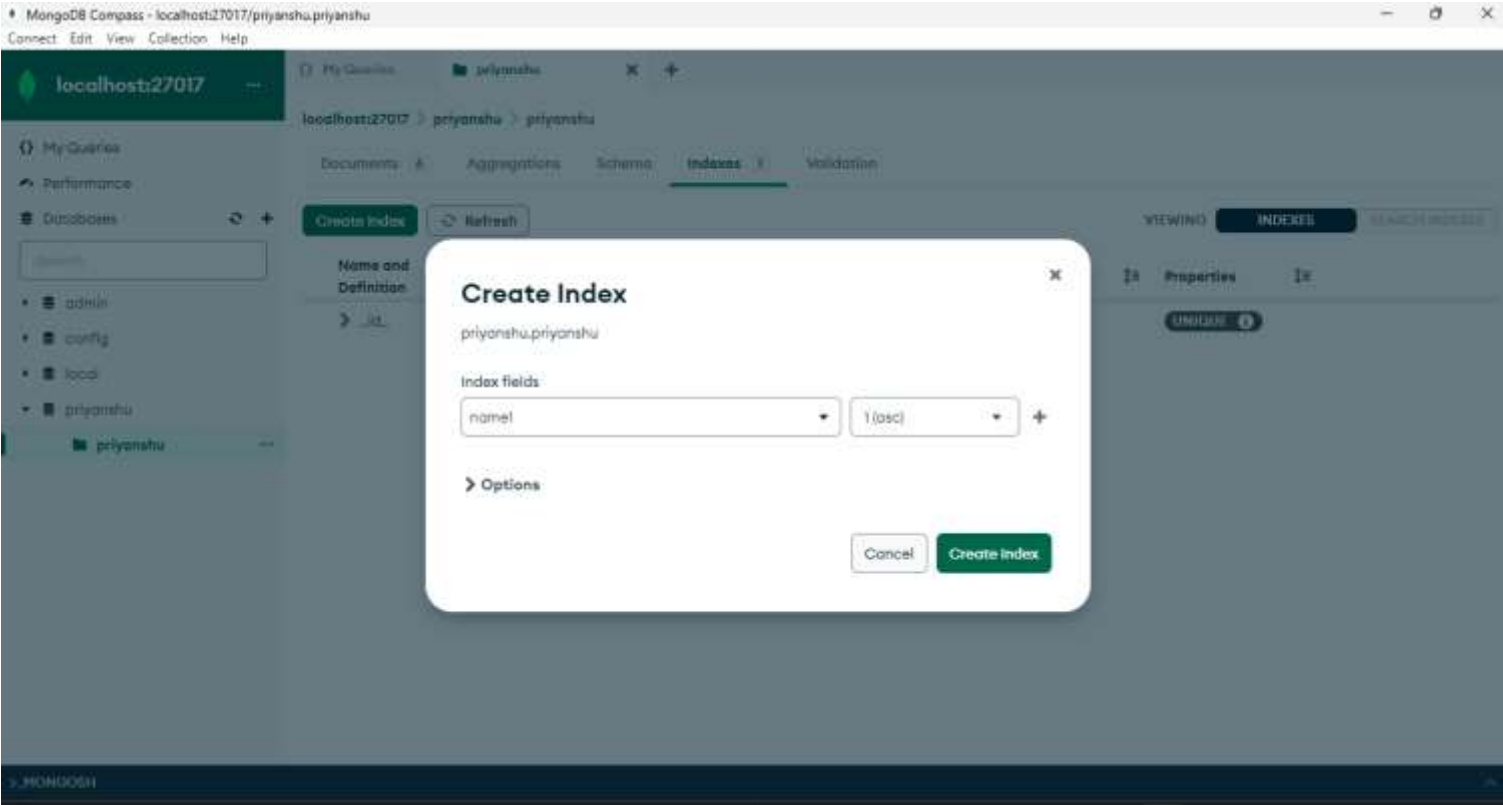
Deleting multiple documents at a time



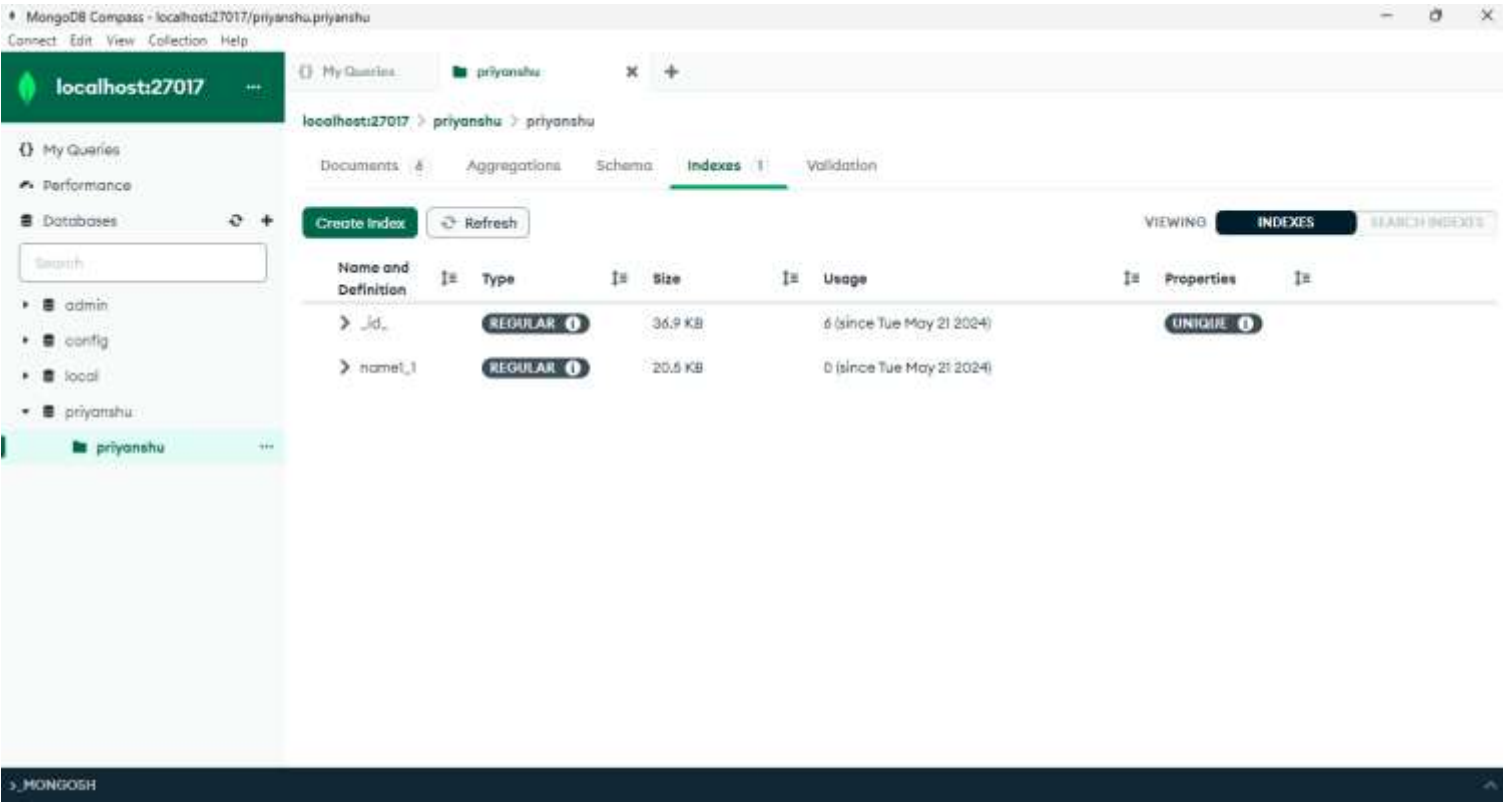
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Creating indexes

1. Single field index

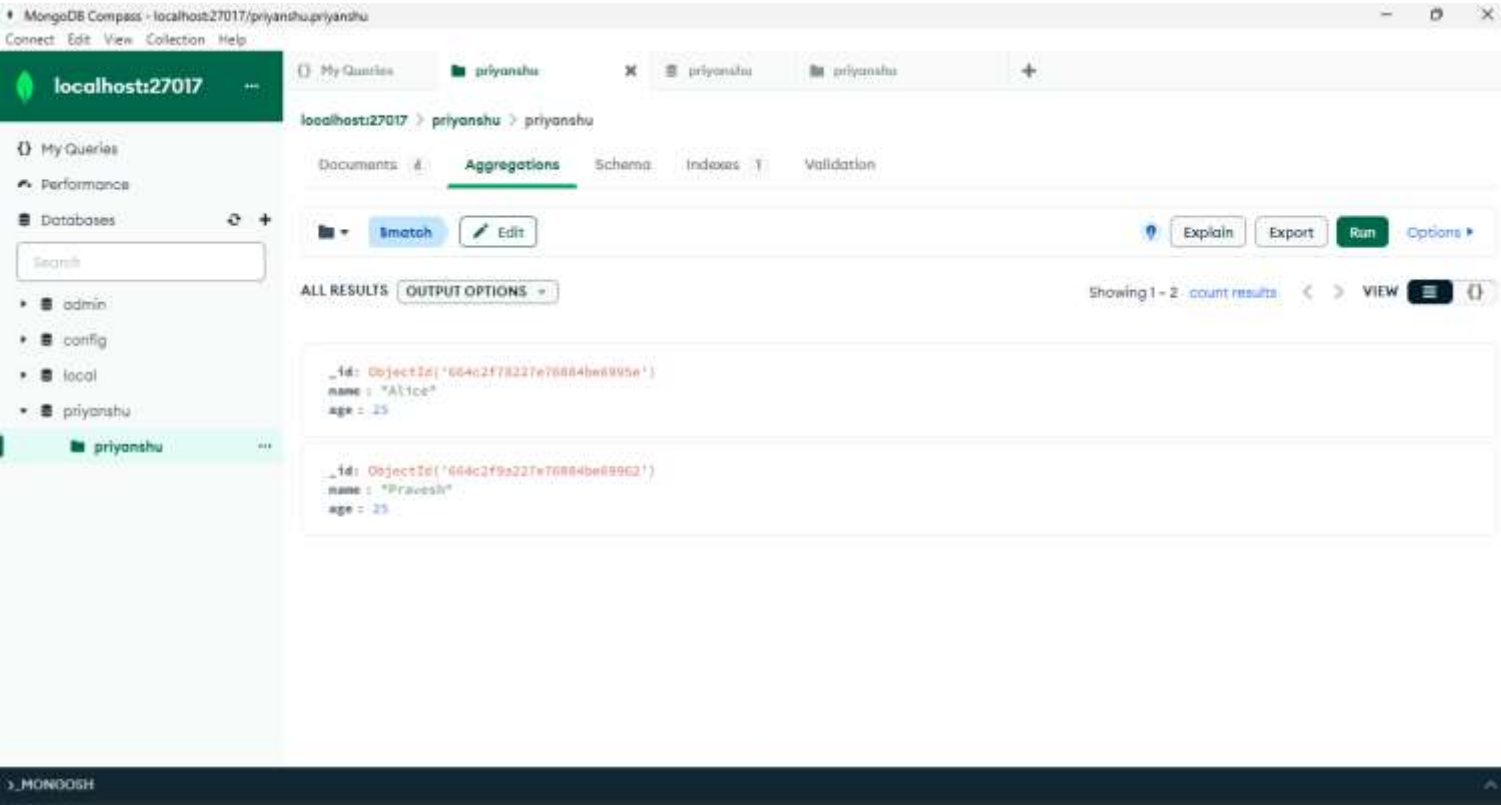


2. Compound index



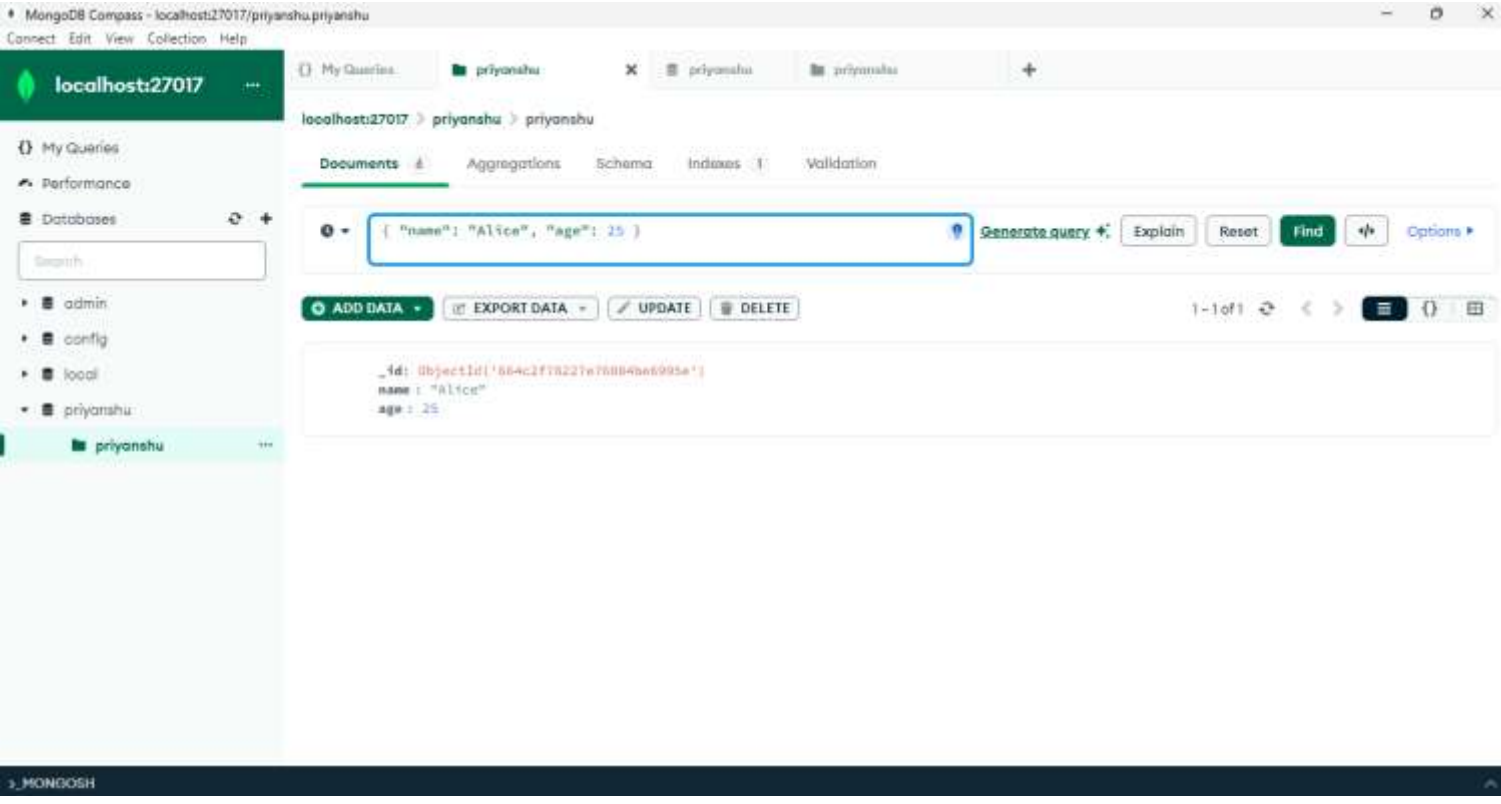
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Aggregation framework



Query optimization

Projections



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Explain Method

The screenshot shows the MongoDB Compass interface. On the left, the 'Databases' sidebar is open, showing a tree view with 'admin', 'config', 'local', and 'priyanshu'. The 'priyanshu' database is selected. The main panel displays the 'Documents' tab for the 'priyanshu' collection. A query is entered in the 'Query' field: `{ "name": "Priyanshu" }`. Below the query field, there are buttons for 'Generate query', 'Explain', 'Reset', 'Find', and 'Options'. The 'Explain' button is highlighted. Below the buttons, there are tabs for 'ADD DATA', 'EXPORT DATA', 'UPDATE', and 'DELETE'. The results section shows a single document:

```
{ "_id": ObjectId("664c2f8b227e788843ae09906"), "name": "Priyanshu", "age": 21 }
```

Limit and skip:

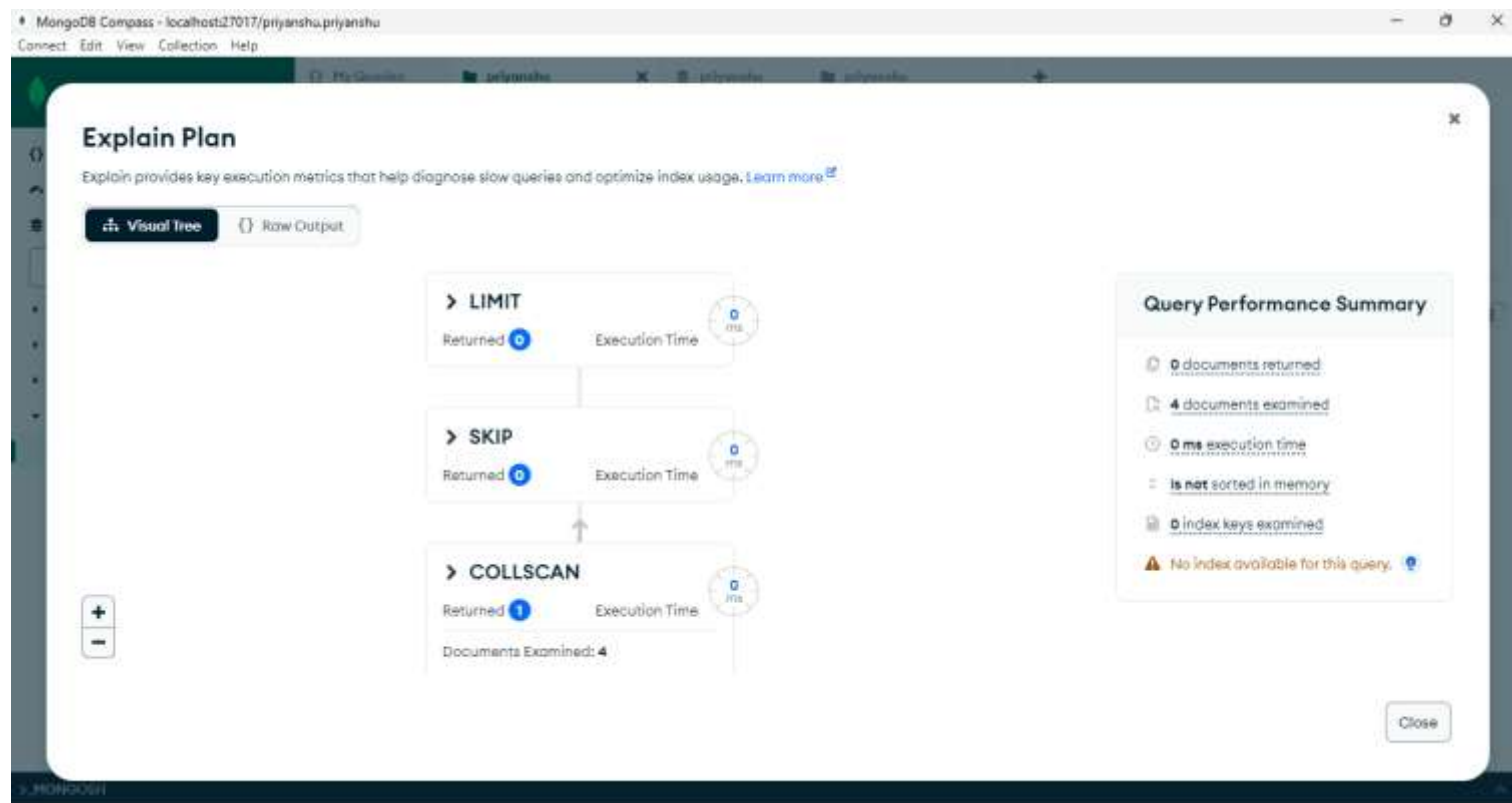
The screenshot shows the MongoDB Compass interface. On the left, the 'Databases' sidebar is open, showing a tree view with 'admin', 'config', 'local', and 'priyanshu'. The 'priyanshu' database is selected. The main panel displays the 'Documents' tab for the 'priyanshu' collection. A query is entered in the 'Query' field: `{}`. Below the query field, there are buttons for 'Generate query', 'Explain', 'Reset', 'Find', and 'Options'. The 'Find' button is highlighted. Below the buttons, there are tabs for 'ADD DATA', 'EXPORT DATA', 'UPDATE', and 'DELETE'. The results section shows two documents:

```
{ "_id": ObjectId("664c2f8b227e788843ae09906"), "name": "Priyanshu", "age": 21 }
{ "_id": ObjectId("664c1f8b227e788843ae09906"), "name": "Pravesh", "age": 25 }
```


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Analysing Performance

Explain method



Profiling

```
mongosh mongodb://127.0.0.1:27017/mongod?directConnection=true&serverSelectionTimeoutMS=2000
Please enter a MongoDB connection string (Default: mongodb://localhost/): mongod
Current Mongosh Log ID: 664c380ad669da61a5cdcdf5
Connecting to: mongodb://127.0.0.1:27017/mongod?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.2.6
Using MongoDB: 7.0.9
Using Mongosh: 2.2.6

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
2024-05-21T08:41:33.687+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
-----

mongod> db.setProfilingLevel(2)
{ was: 0, slowms: 100, sampleRate: 1, ok: 1 }
mongod> db.system.profile.find().sort({ ts: -1 })

mongod>
```