1. **Database Setup: Create a new MongoDB database called myDatabase**
2. **Collection Creation: Create a collection named users within the myDatabase database.**
   <u>Using mongosh:</u>

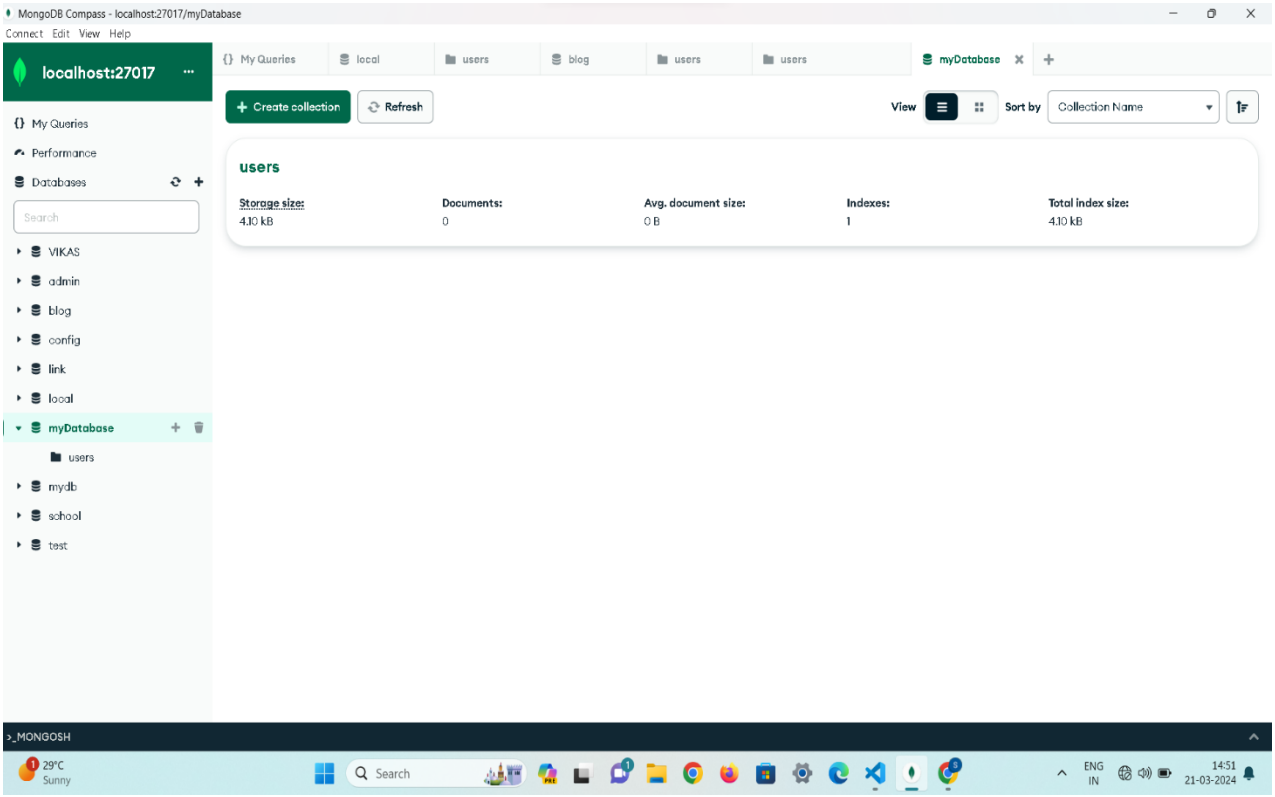
use myDatabase

switched to db myDatabase

db.createCollection("users")

{ ok: 1 }

<u>Output</u>: -



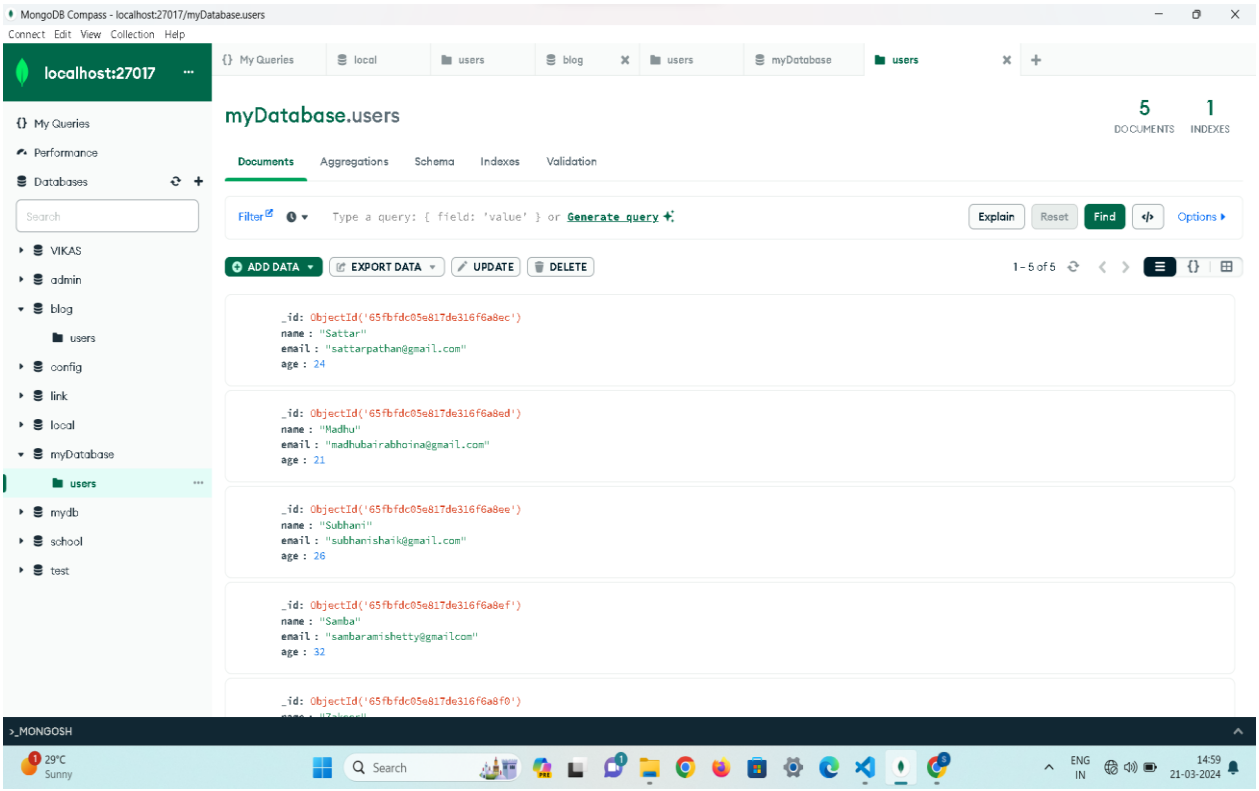
3.Document Insertion: Insert at least three documents into the users collection, each representing a user with fields such as name, email, and age.

```
db.users.insertMany([{"name":"Sattar","email":"sattarpathan@gmail.com","age":24},{"name":"Madhu","email":"madhubairabhoina@gmail.com","age":21},{"name":"Subhani","email":"subhanishaik@gmail.com","age":26},{"name":"Samba","email":"sambaramishetty@gmailcom","age":32},{"name":"Zakeer","email":"zakeerbilla@gmail.com","age":35}])
```

{

```
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('65fbfdc05e817de316f6a8ec'),
    '1': ObjectId('65fbfdc05e817de316f6a8ed'),
    '2': ObjectId('65fbfdc05e817de316f6a8ee'),
    '3': ObjectId('65fbfdc05e817de316f6a8ef'),
    '4': ObjectId('65fbfdc05e817de316f6a8f0')
  }
}
```

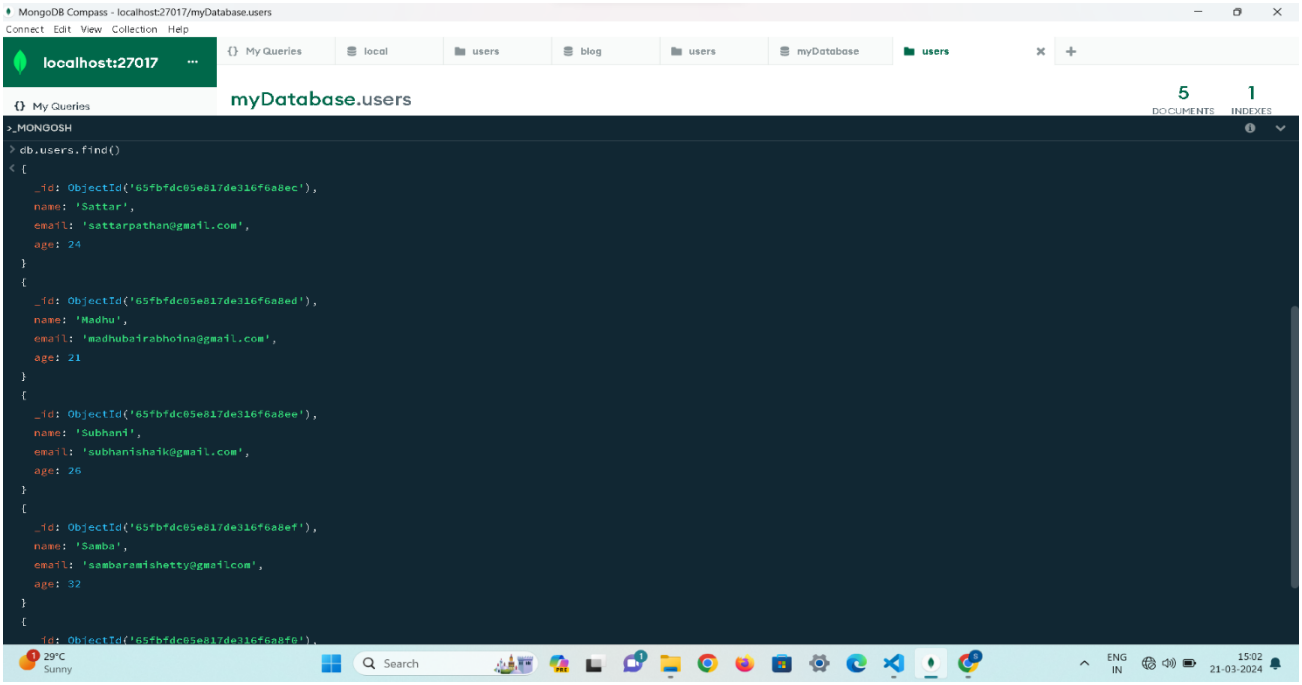
Output: -



4.Querying: Write queries to retrieve:

1.All users from the users collection

```
db.myDatabase.find()
```



2.Users with an age greater than or equal to 30.

```
>_MONGOSH
> db.users.find({age:{$gte:30}})
< {
    _id: ObjectId('65fbfdc05e817de316f6a8ef'),
    name: 'Samba',
    email: 'sambaramishetty@gmailcom',
    age: 32
  }
  {
    _id: ObjectId('65fbfdc05e817de316f6a8f0'),
    name: 'Zakeer',
    email: 'zakeerbilla@gmail.com',
    age: 35
  }
myDatabase>
```

3.Update Operation: Update the age of a user with a specific email address.

```
>_MONGOSH
> db.users.updateOne({"email":"sattarpathan@gmail.com"},{$set:{age:23}})
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
  }
> db.users.find()
< {
    _id: ObjectId('65fbfdc05e817de316f6a8ec'),
    name: 'Sattar',
    email: 'sattarpathan@gmail.com',
    age: 23
  }
  {
    _id: ObjectId('65fbfdc05e817de316f6a8ed'),
    name: 'Madhu',
    email: 'madhubairabhoina@gmail.com',
    age: 21
```

4.Deletion Operation: Delete a user document based on a specific email address.

```
>_MONGOSH
> db.users.deleteOne({"email":"madhubairabhoina@gmail.com"})
< {
    acknowledged: true,
    deletedCount: 1
  }
> db.users.find()
< {
    _id: ObjectId('65fbfdc05e817de316f6a8ec'),
    name: 'Sattar',
    email: 'sattarpathan@gmail.com',
    age: 23
  }
  {
    _id: ObjectId('65fbfdc05e817de316f6a8ee'),
    name: 'Subhani',
    email: 'subhanishaik@gmail.com',
    age: 26
  }
  {
    _id: ObjectId('65fbfdc05e817de316f6a8ef'),
    name: 'Samba',
    email: 'sambaramishetty@gmailcom',
    age: 32
  }
  {
    _id: ObjectId('65fbfdc05e817de316f6a8f0'),
    name: 'Zakeer',
```

5.Index Creation: Create an index on the email field of the users collection.

db.users.createIndex({"email":1})

email_1

db.users.getIndexes()

[

{ v: 2, key: { _id: 1 }, name: '_id_' },

{ v: 2, key: { email: 1 }, name: 'email_1' }

]