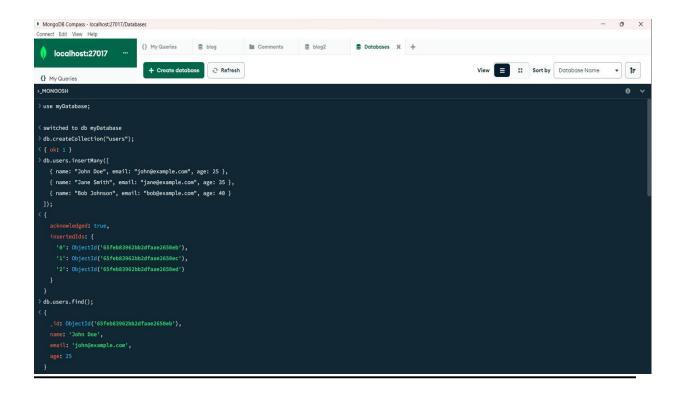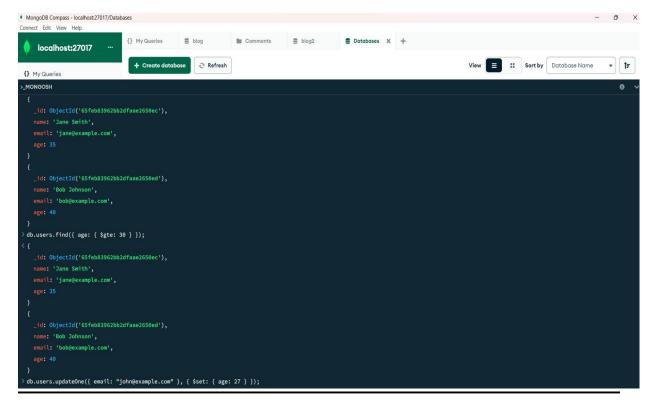# ASSIGNMENT – 4

Creating a Database Using MongoDB and Mongosh

Mongosh Commands

```
// Database Setup: Create a new MongoDB database called myDatabase

>use myDatabase;


// Collection Creation: Create a collection named users within the myDatabase database

>db.createCollection("users");


// Document Insertion: Insert at least three documents into the users collection

>db.users.insertMany([

  { name: "John Doe", email: "john@example.com", age: 25 },

  { name: "Jane Smith", email: "jane@example.com", age: 35 },

  { name: "Bob Johnson", email: "bob@example.com", age: 40 }

]);


// Querying: Retrieve all users from the users collection

>db.users.find();


// Querying: Retrieve users with an age greater than or equal to 30

>db.users.find({ age: { $gte: 30 } });


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

>db.users.updateOne({ email: "john@example.com" }, { $set: { age: 27 } });


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

>db.users.deleteOne({ email: "bob@example.com" });


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

>db.users.createIndex({ email: 1 });
```

Output Of commands


```
> use myDatabase;

< switched to db myDatabase
> db.createCollection("users");
< { ok: 1 }
> db.users.insertMany([
    { name: "John Doe", email: "john@example.com", age: 25 },
    { name: "Jane Smith", email: "jane@example.com", age: 35 },
    { name: "Bob Johnson", email: "bob@example.com", age: 40 }
  ]);
< {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId('65feb83962bb2dfaae2650eb'),
      '1': ObjectId('65feb83962bb2dfaae2650ec'),
      '2': ObjectId('65feb83962bb2dfaae2650ed')
    }
  }
> db.users.find();
< {
    _id: ObjectId('65feb83962bb2dfaae2650eb'),
    name: 'John Doe',
    email: 'john@example.com',
    age: 25
  }
```



```
  {
    _id: ObjectId('65feb83962bb2dfaae2650ec'),
    name: 'Jane Smith',
    email: 'jane@example.com',
    age: 35
  }
  {
    _id: ObjectId('65feb83962bb2dfaae2650ed'),
    name: 'Bob Johnson',
    email: 'bob@example.com',
    age: 40
  }
> db.users.find({ age: { $gte: 30 } });
< {
    _id: ObjectId('65feb83962bb2dfaae2650ec'),
    name: 'Jane Smith',
    email: 'jane@example.com',
    age: 35
  }
  {
    _id: ObjectId('65feb83962bb2dfaae2650ed'),
    name: 'Bob Johnson',
    email: 'bob@example.com',
    age: 40
  }
> db.users.updateOne({ email: "john@example.com" }, { $set: { age: 27 } });
```

Connect Edit View Help

localhost:27017 ...

{} My Queries   blog   Comments   blog2   Databases ✕ +

+ Create database   ⟳ Refresh

{} My Queries

View ☰ ⠿   Sort by Database Name ▾ ↓≡

>_MONGOSH   ⓘ ⌄

```
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
  }
> db.users.deleteOne({ email: "bob@example.com" });
< {
    acknowledged: true,
    deletedCount: 1
  }
> db.users.createIndex({ email: 1 });
< email_1
> db.users.find();
< {
    _id: ObjectId('65feb83962bb2dfaae2650eb'),
    name: 'John Doe',
    email: 'john@example.com',
    age: 27
  }
  {
    _id: ObjectId('65feb83962bb2dfaae2650ec'),
    name: 'Jane Smith',
    email: 'jane@example.com',
    age: 35
  }
myDatabase >
```

{} My Queries

+ Create database   ⟳ Refresh

View ☰ ⠿   Sort by Database Name ▾ ↓≡

```
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
```