// 1. Create database "Employee"

use Employee;

// 2. Create collection "emp1" using createCollection method

db.createCollection("emp1");

// 3. Insert 4 to 5 documents in "emp1" collection

db.emp1.insertMany([

{ eno: 1, ename: "John Doe", address: "123 Elm St", sal: 6000 },

{ eno: 2, ename: "Jane Smith", address: "456 Oak St", sal: 8000 },

{ eno: 3, ename: "Mike Johnson", address: "789 Pine St", sal: 3000 },

{ eno: 4, ename: "Nancy White", address: "101 Maple St", sal: 10000 },

{ eno: 5, ename: "Jim Brown", address: "202 Birch St", sal: 12000 }

]);

// 4. Display all documents

db.emp1.find().pretty();

// 5. Insert document by creating own object id

db.emp1.insertOne({ \_id: ObjectId("60a734f29e78f3aef2d1c3b7"), eno: 6, ename: "Sara Black", address: "333 Willow St", sal: 7000 });

// 6. Display all employees having salary greater than 5000

db.emp1.find({ sal: { $gt: 5000 } }).pretty();

// 7. Display all employees having salary less than 15000

db.emp1.find({ sal: { $lt: 15000 } }).pretty();

// 8. Display all employees having salary greater than 10000 and less than 20000

db.emp1.find({ sal: { $gt: 10000, $lt: 20000 } }).pretty();

// 9. Update salary of all employees with a 10% increase

db.emp1.updateMany({}, { $mul: { sal: 1.1 } });

// 10. Delete employees having salary less than 5000

db.emp1.deleteMany({ sal: { $lt: 5000 } });

// 11. Rename collection "emp1" to "employee1"

db.emp1.renameCollection("employee1");

// 12. Display employees whose name starts with "n" (case-insensitive)

db.employee1.find({ ename: { $regex: /^n/i } }).pretty();

// 13. Sort employees by name in ascending order

db.employee1.find().sort({ ename: 1 }).pretty();

// 14. Create a new database with name "Employee1"

use Employee1;

// 15. Drop "Employee1" database

db.dropDatabase();

// Switch back to the original Employee database for the next operations

use Employee;

// 16. Create collection "emp1" using insert method

db.emp1.insertOne({ eno: 7, ename: "Alice Green", address: "400 Cedar St", sal: 9000 });

// 17. Drop collection "emp1"

db.emp1.drop();