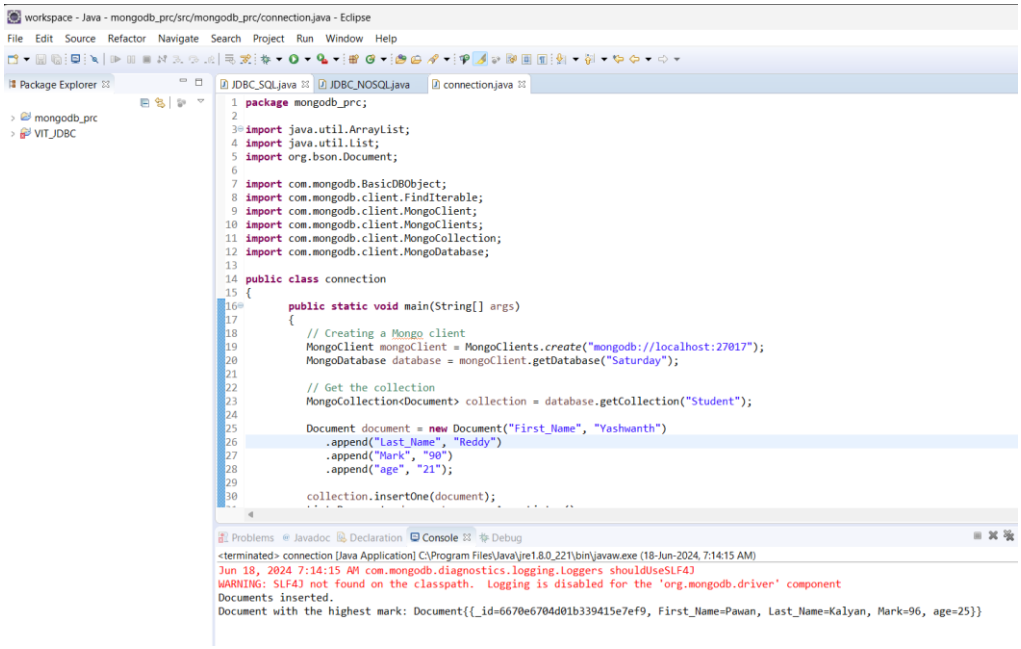
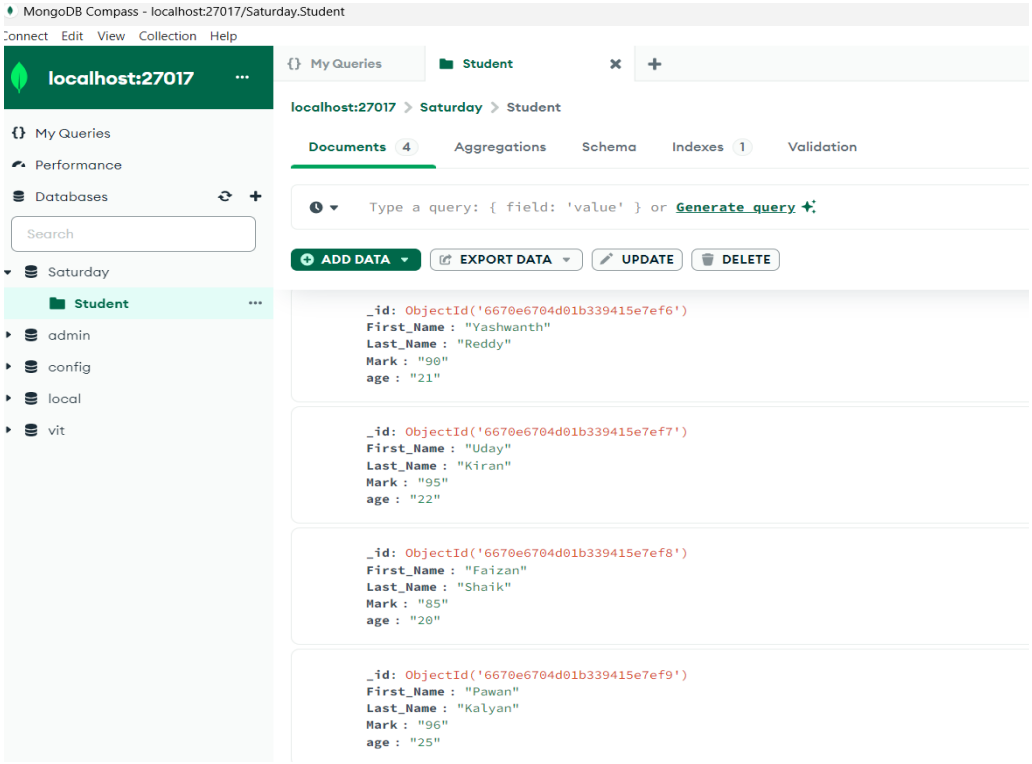
Bomma Yaswanth class task 2 22BRS1269 15-06-2024

Output 1 :





Code :

```
package mongodb_prc;

import java.util.ArrayList;
import java.util.List;
import org.bson.Document;
```

```
import com.mongodb.BasicDBObject;
import com.mongodb.client.FindIterable;
import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;

public class connection
{
          public static void main(String[] args)
          {
             // Creating a Mongo client
             MongoClient mongoClient =
MongoClients.create("mongodb://localhost:27017");
             MongoDatabase database = mongoClient.getDatabase("Saturday");

             // Get the collection
             MongoCollection<Document> collection =
database.getCollection("Student");

             Document document = new Document("First_Name", "Yashwanth")
                .append("Last_Name", "Reddy")
                .append("Mark", "90")
                .append("age", "21");

             collection.insertOne(document);
             List<Document> documents = new ArrayList<>();

             documents.add(new Document("First_Name", "Uday")
                       .append("Last_Name", "Kiran")
                       .append("Mark", "95")
                       .append("age", "22"));

             documents.add(new Document("First_Name", "Faizan")
                             .append("Last_Name", "Shaik")
                             .append("Mark", "85")
                             .append("age", "20"));

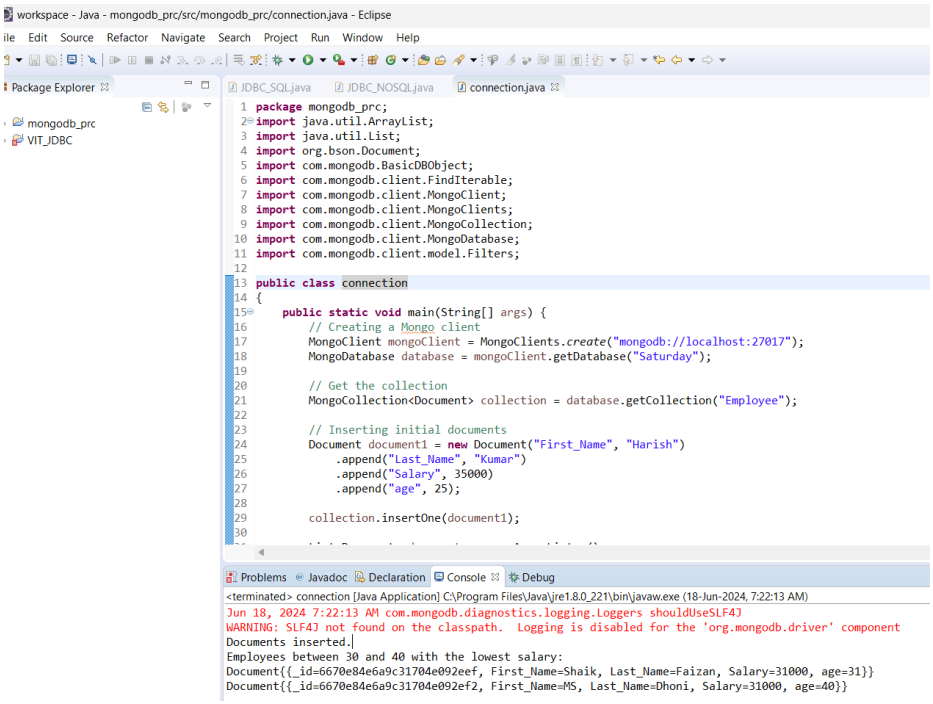
             documents.add(new Document("First_Name", "Pawan")
                             .append("Last_Name", "Kalyan")
                             .append("Mark", "96")
                             .append("age", "25"));

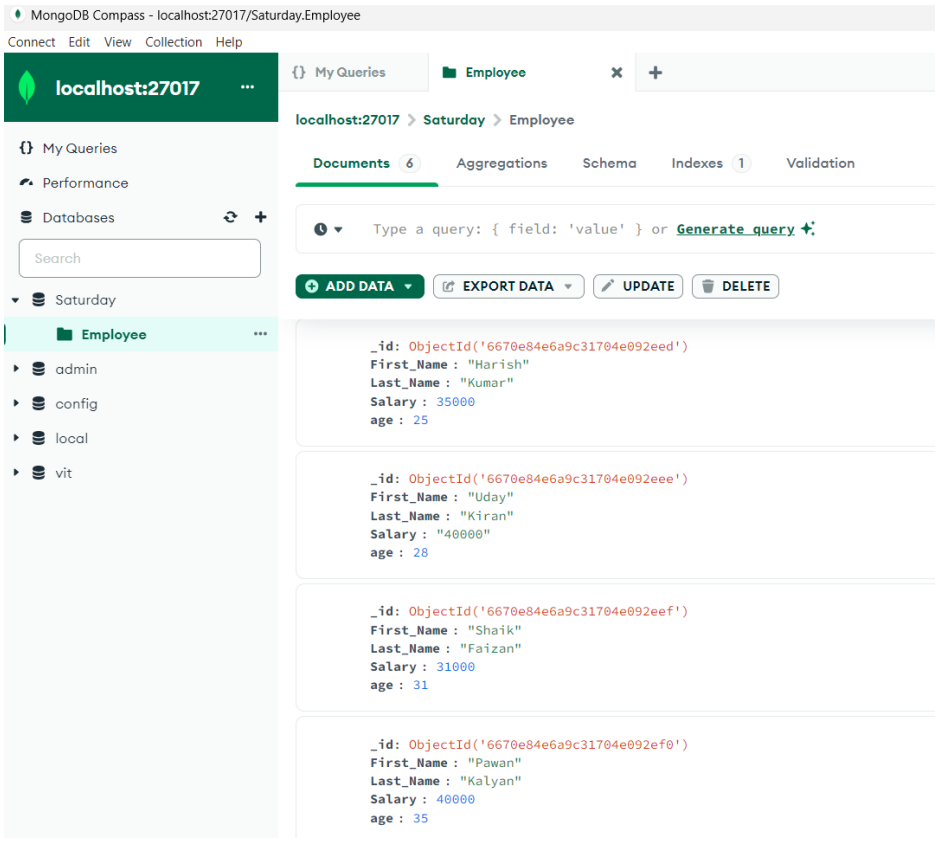
             collection.insertMany(documents);

             System.out.println("Documents inserted.");
             FindIterable<Document> topStudent = collection.find().sort(new
BasicDBObject("Mark",-1)).limit(1);
               for (Document doc : topStudent) {
                   System.out.println("Document with the highest mark: " + doc);
               }

          }
}
```

Output 2 :





Code :

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package mongodb_prc;
import java.util.ArrayList;
import java.util.List;
import org.bson.Document;
import com.mongodb.BasicDBObject;
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import com.mongodb.client.FindIterable;
import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.model.Filters;

public class connection
{
    public static void main(String[] args) {
        // Creating a Mongo client
        MongoClient mongoClient =
MongoClients.create("mongodb://localhost:27017");
        MongoDatabase database = mongoClient.getDatabase("Saturday");

        // Get the collection
        MongoCollection<Document> collection = database.getCollection("Employee");

        // Inserting initial documents
        Document document1 = new Document("First_Name", "Harish")
            .append("Last_Name", "Kumar")
            .append("Salary", 35000)
            .append("age", 25);

        collection.insertOne(document1);

        List<Document> documents = new ArrayList<>();
        documents.add(new Document("First_Name", "Uday")
                .append("Last_Name", "Kiran")
                .append("Salary", "40000")
                .append("age", 28));

        documents.add(new Document("First_Name", "Shaik")
                .append("Last_Name", "Faizan")
                .append("Salary", 31000)
                .append("age", 31));

        documents.add(new Document("First_Name", "Pawan")
                .append("Last_Name", "Kalyan")
                .append("Salary", 40000)
                .append("age", 35));

        documents.add(new Document("First_Name", "Virat")
                .append("Last_Name", "Kohli")
                .append("Salary", 39000)
                .append("age", 33));

        documents.add(new Document("First_Name", "MS")
                .append("Last_Name", "Dhoni")
                .append("Salary", 31000)
                .append("age", 40));

        collection.insertMany(documents);

        System.out.println("Documents inserted.");
        FindIterable<Document> lowSalary =
collection.find(Filters.and(Filters.gte("age", 30),Filters.lte("age", 40)))
                .sort(new BasicDBObject("Salary",1)).limit(1);
```

```
        if (lowSalary != null)
        {
            int lowestSalary = lowSalary.first().getInteger("Salary");
            List<Document> List = new ArrayList<>();
            for (Document doc : collection.find(Filters.and(Filters.gte("age",
30),Filters.lte("age", 40),Filters.eq("Salary", lowestSalary))))
            {
                List.add(doc);
            }

            System.out.println("Employees between 30 and 40 with the lowest
salary:");
            for (Document doc : List)
            {
                System.out.println(doc);
            }
        }
    }
}
```