```
import com.mongodb.ErrorCategory;
import com.mongodb.MongoClient;
import com.mongodb.MongoClientURI;
import com.mongodb.MongoWriteException;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoCursor;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.model.Filters;
import org.bson.Document;

import java.util.ArrayList;
import java.util.Scanner;

public class MongoJava {

    public void Display_mongo(){
        // Connect to MongoDB Server on localhost, port 27017 (default)
        final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

        final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");

        //Insert a document into the  collection.
        MongoCollection<Document> collection =
database.getCollection("student");

        try (MongoCursor< Document > cur = collection.find().iterator()) {

            while (cur.hasNext()) {

                var doc = cur.next();
                var users = new ArrayList< >(doc.values());

                System.out.printf("%s: %s %s %s %n", users.get(1),
users.get(2),users.get(3),users.get(4));
            }
        }
    }

    public void update_mongo(int roll1,String newsub,int newmark){

        final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

        final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");

        MongoCollection<Document> collection =
database.getCollection("student");


        collection.updateOne(new Document("Roll_no", roll1),
                new Document("$set", new Document("Subject", newsub)));

        collection.updateOne(new Document("Roll_no", roll1),
                new Document("$set" , new Document("marks",newmark)));

    }

    public void search_mongo(int id1){
```

```
        // Connect to MongoDB Server on localhost, port 27017 (default)
        final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

        final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");

        //Insert a document into the  collection.
        MongoCollection<Document> collection =
database.getCollection("student");

        try (MongoCursor<Document> cur =
collection.find(Filters.eq("Roll_no",id1)).iterator()) {

            while (cur.hasNext()) {

                var doc = cur.next();
                var users = new ArrayList< >(doc.values());

                System.out.printf("%s: %s %s %s %n", users.get(1),
users.get(2),users.get(3),users.get(4));
            }
        }
    }

    public void delete_mongo(int id1){
        // Connect to MongoDB Server on localhost, port 27017 (default)
        final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

        final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");

        MongoCollection<Document> collection =
database.getCollection("student");

        try  {
            collection.deleteMany(Filters.gte("Roll_no", id1));
            System.out.println("Deleted successfully");
            }
        catch (Exception e) {
            e.printStackTrace();
        }
    }

    public void insert_mongo(String name1,int roll1, String sub1, int
mark1){

        final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

        final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");

        MongoCollection<Document> collection =
database.getCollection("student");

        Document Student1 =new Document();
        Student1.append("Name",name1)
                .append("Roll_no",roll1)
                .append("Subject",sub1)
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                .append("marks",mark1);

        try {
            collection.insertOne(Student1);
            System.out.println("Successfully inserted documents. \n");
        } catch (MongoWriteException mwe) {
            if
(mwe.getError().getCategory().equals(ErrorCategory.DUPLICATE_KEY)) {
                System.out.println("Document with that id already exists");
            }
        }

    }


    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        try {

            // Connect to MongoDB Server on localhost, port 27017 (default)
            final MongoClient mongoClient = new MongoClient(new
MongoClientURI("mongodb://localhost:27017"));

            // Connect to Database "assi4connectivity"
            final MongoDatabase database =
mongoClient.getDatabase("assi4connectivity");
            System.out.println("Successful database connection established.
\n");

            //Insert a document into the "student" collection.
            MongoCollection<Document> collection =
database.getCollection("student");

            // Delete the collection and start fresh
            collection.drop();
            MongoJava obj1=new MongoJava();


            int ch;
            String n1,c1;
            int id1,id2;
            do
            {
                System.out.println("----------------------------------------
-----");
                System.out.println("   1.Display all Records");
                System.out.println("   2.Insert new Record");
                System.out.println("   3.Update old Record");
                System.out.println("   4.Delete  Record");
                System.out.println("   5.Search  Record");
                System.out.println("   6.Number of collection");
                System.out.println("   55.Exit");
                System.out.println("----------------------------------------
-----");
                System.out.println("   Enter your Choice");
                ch=sc.nextInt();
                switch(ch){
                    case 1: obj1.Display_mongo();
                        break;

                    case 2:
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                        System.out.println("Enter Student Name: ");
                        n1=sc.next();
                        System.out.println("Enter Student Rollno: ");
                        id1=sc.nextInt();
                        System.out.println("Enter Student Subject: ");
                        c1=sc.next();
                        System.out.println("Enter Student Marks: ");
                        id2=sc.nextInt();
                        obj1.insert_mongo(n1,id1,c1,id2);
                        break;

                    case 3:
                        System.out.println("Enter Student Rollno: ");
                        id1=sc.nextInt();
                        System.out.println("Enter Student new Subject: ");
                        c1=sc.next();
                        System.out.println("Enter Student new Marks: ");
                        id2=sc.nextInt();
                        obj1.update_mongo(id1,c1,id2);
                        break;

                    case 4:
                        System.out.println("Enter Student Rollno: ");
                        id1=sc.nextInt();
                        obj1.delete_mongo(id1);
                        break;
                    case 5:
                        System.out.println("Enter Student Rollno: ");
                        id1=sc.nextInt();
                        obj1.search_mongo(id1);
                        break;

                    case 6:
                        System.out.println("Collection size: " +
collection.count() + " documents. \n");
                        break;

                }
            }while(ch!=55);

        } catch (Exception exception) {
            System.err.println(exception.getClass().getName() + ": " +
exception.getMessage());
        }
    }
}
```