

// 31139 – Durvesh – DBMSLC1

// Sample Code

```
package mongojavacon;

import com.mongodb.client.*;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.model.Updates;
import org.bson.Document;

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

public class Main {

    public static void main(String[] args) {
        MongoClient mongoClient = MongoClient.create("mongodb://127.0.0.1:27017");
        MongoDBDatabase db = mongoClient.getDatabase("doorways");
        MongoCollection<Document> teachers = db.getCollection("teachers");
        Scanner scanner = new Scanner(System.in);
        System.out.println("-----Welcome to Teacher Database!-----");
        int choice = 0;
        while (choice != 8) {
            System.out.println("0. View Selective  1. View all  2. Insert One  3. Insert Many  4. Update One\n5. Update Many" +
                " 6. Delete One  7. Delete Many  8. Exit");
            choice = scanner.nextInt();
            switch (choice) {
                case 0:
                    scanner.nextLine();
                    Document filterfind = new Document();
                    System.out.println("Enter Field you want to match");
                    String matchfieldfind = scanner.nextLine();
                    System.out.println("Enter the value of the field you want to match");
                    String matchvaluefind = scanner.nextLine();
                    filterfind.put(matchfieldfind, matchvaluefind);
                    MongoClient cursor1 = teachers.find(filterfind).iterator();
                    while (cursor1.hasNext()) {
                        System.out.println(cursor1.next().toJson());
                    }
                    break;
                case 1:
                    MongoClient cursor = teachers.find().iterator();
                    while (cursor.hasNext()) {
                        System.out.println(cursor.next().toJson());
                    }
                    break;
                case 2:
                    scanner.nextLine();
                    String field = "";
                    String value;
                    Document docinsert = new Document();
                    while (true) {
                        System.out.println("Enter Field name or enter exit");
                        field = scanner.nextLine();
                        if (field.equals("exit"))
                            break;
                        System.out.println("Enter field value");
                        value = scanner.nextLine();
                        docinsert.put(field, value);
                    }
            }
        }
    }
}
```

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        teachers.insertOne(docinsert);
        break;
    case 3:
        ArrayList<Document> objects = new ArrayList<>();
        System.out.println("Enter number of records you want to
enter");

        int numrec = scanner.nextInt();
        scanner.nextLine();
        for(int i=0;i<numrec;i++){
            System.out.println("Record no. "+ i);
            String fieldn="";
            String valuen;
            Document docu = new Document();
            while (true){
                System.out.println("Enter Field name or enter exit");
                fieldn = scanner.nextLine();
                if(fieldn.equals("exit"))
                    break;
                System.out.println("Enter field value");
                valuen = scanner.nextLine();
                docu.put(fieldn,valuen);
            }
            objects.add(docu);
        }
        teachers.insertMany(objects);
        break;
    case 4:
        scanner.nextLine();
        Document filter=new Document();
        System.out.println("Enter Field you want to match");
        String matchfield = scanner.nextLine();
        System.out.println("Enter the value of the field you want to
match");

        String matchvalue = scanner.nextLine();
        filter.put(matchfield,matchvalue);
        System.out.println("Enter the Field you want to update");
        String updatefield = scanner.nextLine();
        System.out.println("Enter the updated value for the field
above");

        String updatevalue = scanner.nextLine();
        teachers.updateOne(filter,
Updates.set(updatefield,updatevalue));
        break;
    case 5:
        scanner.nextLine();
        Document filtermult=new Document();
        System.out.println("Enter Field you want to match");
        String matchfieldmult = scanner.nextLine();
        System.out.println("Enter the value of the field you want to
match");

        String matchvaluemult = scanner.nextLine();
        filtermult.put(matchfieldmult,matchvaluemult);
        System.out.println("Enter the Field you want to update");
        String updatefieldmult = scanner.nextLine();
        System.out.println("Enter the updated value for the field
above");

        String updatevaluemult = scanner.nextLine();

        teachers.updateMany(filtermult,Updates.set(updatefieldmult,updatevaluemult));
        break;
    case 6:
        scanner.nextLine();
        System.out.println("Enter Field you want to match");
        String matchfielddelete = scanner.nextLine();
        System.out.println("Enter the value of the field you want to
match");

        String matchvaluedelete = scanner.nextLine();
        Document filterdelete = new Document();

```


