

## Creating the database:

### Code:

```
package connection;

import org.bson.Document;

import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.MongoIterable;

public class mongoDB {

    public static void main(String[] args) {

        // Creating a Mongo client

        MongoClient mongoClient = MongoClients.create("mongodb://localhost:27017");

        MongoDatabase database=mongoClient.getDatabase("monday123");

        database.createCollection("employeeRecord");

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

        Document document= new Document("title","MongoDB");

        collection.insertOne(document);

        MongoIterable<String> loop1 = mongoClient.listDatabaseNames();

        for (String name : loop1) {

            System.out.println(name);
```

```
}  
  
}  
  
}
```

## Dropping the database

### Code:

```
package connection;  
  
import org.bson.Document;  
  
  
import com.mongodb.client.MongoClient;  
import com.mongodb.client.MongoClients;  
import com.mongodb.client.MongoCollection;  
import com.mongodb.client.MongoDatabase;  
import com.mongodb.client.MongoIterable;  
  
public class mongoDB {  
    public static void main(String[] args) {  
        // Creating a Mongo client  
        MongoClient mongoClient =  
MongoClients.create("mongodb://localhost:27017");  
        MongoDatabase database=mongoClient.getDatabase("monday123");  
        database.drop();  
        System.out.println("Database dropped.");  
        Mongolterable<String> loop1 = mongoClient.listDatabaseNames();  
        for (String name : loop1){  
            System.out.println(name);  
        }  
    }  
}
```

```
__}
```

```
__}
```

```
}
```

### **Create and display the collections**

#### **Code:**

```
package connection;
```

```
import org.bson.Document;
```

```
import com.mongodb.client.MongoClient;
```

```
import com.mongodb.client.MongoClients;
```

```
import com.mongodb.client.MongoCollection;
```

```
import com.mongodb.client.MongoDatabase;
```

```
import com.mongodb.client.MongoIterable;
```

```
public class collectionDB {
```

```
__ public static void main(String[] args) {
```

```
__ __ // Creating a Mongo client
```

```
__ __ MongoClient mongoClient =
```

```
MongoClients.create("mongodb://localhost:27017");
```

```
__ __ MongoDB database = mongoClient.getDatabase("myDb");
```

```
__ __ database.createCollection("sampleCollection");
```

```
__ __ Mongolterable<String> collections = database.listCollectionNames();
```

```
__ __ for (String name : collections) {
```

```
____System.out.println(name);  
____}  
  
____}  
____}
```

### **Insert documents**

#### **Code:**

```
package connection;  
  
import java.util.ArrayList;  
import java.util.List;  
  
import org.bson.Document;  
  
import com.mongodb.client.MongoClient;  
import com.mongodb.client.MongoClients;  
import com.mongodb.client.MongoCollection;  
import com.mongodb.client.MongoDatabase;  
  
public class insertionDB {  
____public static void main(String[] args) {  
____    // Creating a Mongo client  
____    MongoClient mongoClient =  
MongoClients.create("mongodb://localhost:27017");  
____    MongoDB database = mongoClient.getDatabase("myDb");  
  
____    // Get the collection  
____    MongoClient<Document> collection =  
database.getCollection("sampleCollection");
```

```
Document document = new Document("First_Name", "Mahesh")
    .append("Last_Name", "Parashar")
    .append("Date_Of_Birth", "1990-08-21")
    .append("e_mail", "mahesh_parashar.123@gmail.com")
    .append("phone", "9034343345");
```

```
collection.insertOne(document);
```

```
List<Document> documents = new ArrayList<>();
```

```
documents.add(new Document("First_Name", "Radhika")
    .append("Last_Name", "Sharma")
    .append("Date_Of_Birth", "1995-09-26")
    .append("e_mail", "radhika_sharma.123@gmail.com")
    .append("phone", "9000012345"));
```

```
documents.add(new Document("First_Name", "Rachel")
    .append("Last_Name", "Christopher")
    .append("Date_Of_Birth", "1990-02-16")
    .append("e_mail", "Rachel_Christopher.123@gmail.com")
    .append("phone", "9000054321"));
```

```
documents.add(new Document("First_Name", "Fathima")
    .append("Last_Name", "Sheik")
    .append("Date_Of_Birth", "1990-02-16")
    .append("e_mail", "Fathima_Sheik.123@gmail.com")
    .append("phone", "9000054321"));
```

```
collection.insertMany(documents);

System.out.println("Documents inserted.");
}
}
```

### Retrive documents from the collection

**Code:**

```
package connection;
```

```
import org.bson.Document;
```

```
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 retrieveDB {
```

```
    public static void main(String[] args) {
```

```
        MongoClient mongoClient =
```

```
MongoClients.create("mongodb://localhost:27017");
```

```
        MongoDB database = mongoClient.getDatabase("myDb");
```

```
        // Get the collection
```

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

```

FindIterable<Document> allDocuments=collection.find();

for (Document document: allDocuments){
    System.out.println(document);
}

System.out.println("***Selected Document***");

FindIterable<Document>
documents=collection.find(Filters.eq("First_Name","Mahesh"));

for(Document document: documents){
    System.out.println(document);
}

}
}
}

```

### On user Input

#### Code:

```

package connection;

import org.bson.Document;
import java.util.Scanner;

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 selectionvalues {


    public static void main(String[] args) {

        MongoClient mongoClient =
MongoClients.create("mongodb://localhost:27017");

        MongoDatabase database = mongoClient.getDatabase("myDb");

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


        Scanner sc = new Scanner(System.in);


        // Insert a new document

        System.out.println("Enter First_Name:");

        String firstName = sc.nextLine();


        System.out.println("Enter Last_Name:");

        String lastName = sc.nextLine();


        System.out.println("Enter Age:");

        int age = sc.nextInt();

        sc.nextLine(); // Consume newline


        Document newDoc = new Document("First_Name", firstName)

            .append("Last_Name", lastName)
```



```

_____ .append("Age", age);

_____ collection.insertOne(newDoc);

_____ System.out.println("Document inserted successfully!\n");

_____

_____ // Retrieve all documents

_____ System.out.println("=== All Documents ===");

_____ FindIterable<Document> allDocuments = collection.find();

_____ for (Document doc : allDocuments) {

_____     System.out.println(doc.toJson());

_____ }

_____

_____ // Filtered document search using user input

_____ System.out.println("\nEnter field name to filter (e.g., First_Name):");

_____ String filterField = sc.nextLine();

_____

_____ System.out.println("Enter value to search for:");

_____ String filterValue = sc.nextLine();

_____

_____ System.out.println("*** Selected Document(s) ***");

_____ FindIterable<Document> filteredDocs = collection.find(Filters.eq(filterField,
filterValue));

_____ for (Document doc : filteredDocs) {

_____     System.out.println(doc.toJson());

_____ }

_____

_____ sc.close();

_____ mongoClient.close();

```

—}

}