**CREATING A DATABASE**

**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) {**

**// Establish connection to MongoDB server**

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

**// Create or access a database named 'monday123'**

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

**// Create a new collection inside the database**

**database.createCollection("employeeRecord");**

**// Insert a sample document into another collection**

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

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

**collection.insertOne(document);**

**// Display all available databases**

**MongoIterable<String> dbList = mongoClient.listDatabaseNames();**

**for (String name : dbList) {**

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

**}**

**}**

**}**

**DROPPING A DATABASE**

**package connection;**

**import com.mongodb.client.MongoClient;**

**import com.mongodb.client.MongoClients;**

**import com.mongodb.client.MongoDatabase;**

**import com.mongodb.client.MongoIterable;**

**public class mongoDB {**

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

**// Connect to MongoDB server**

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

**// Access the database to be dropped**

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

**// Drop the specified database**

**database.drop();**

**System.out.println("Database dropped.");**

**// List remaining databases**

**MongoIterable<String> dbList = mongoClient.listDatabaseNames();**

**for (String name : dbList) {**

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

**}**

**}**

**}**

**CREATING AND DISPLAYING A COLLECTION**

**package connection;**

**import com.mongodb.client.MongoClient;**

**import com.mongodb.client.MongoClients;**

**import com.mongodb.client.MongoDatabase;**

**import com.mongodb.client.MongoIterable;**

**public class collectionDB {**

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

**// Connect to MongoDB server**

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

**// Access or create the database**

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

**// Create a new collection**

**database.createCollection("sampleCollection");**

**// Display all collection names**

**MongoIterable<String> collections = database.listCollectionNames();**

**for (String name : collections) {**

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

**}**

**}**

**}**

**INSERTING DOCUMENTS INTO A COLLECTION**

**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) {**

**// Connect to MongoDB**

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

**// Access the database**

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

**// Get the collection**

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

**// Insert a single document**

**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);**

**// Insert multiple documents**

**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.");**

**}**

**}**

**RETRIEVING ALL DOCUMENTS & FILTERED RESULTS**

**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) {**

**// Connect to MongoDB**

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

**// Access the database**

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

**// Get the collection**

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

**// Fetch and display all documents**

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

**for (Document document : allDocuments) {**

**System.out.println(document);**

**}**

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

**// Retrieve specific document(s) based on filter**

**FindIterable<Document> filteredDocuments = collection.find(Filters.eq("First\_Name", "Mahesh"));**

**for (Document doc : filteredDocuments) {**

**System.out.println(doc);**

**}**

**}**

**}**

**INSERT & RETRIEVE DOCUMENTS BASED ON USER INPUT**

**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) {**

**// Connect to MongoDB server**

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

**// Access the target database**

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

**// Get the collection**

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

**Scanner sc = new Scanner(System.in);**

**// Accept user input for 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**

**// Insert user input as a new document**

**Document newDoc = new Document("First\_Name", firstName)**

**.append("Last\_Name", lastName)**

**.append("Age", age);**

**collection.insertOne(newDoc);**

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

**// Display all documents from the collection**

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

**FindIterable<Document> allDocs = collection.find();**

**for (Document doc : allDocs) {**

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

**}**

**// Filter documents based on 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("\*\*\* Filtered Document(s) \*\*\*");**

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

**for (Document doc : filteredDocs) {**

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

**}**

**sc.close();**

**mongoClient.close();**

**}**

**}**