

```

import java.sql.*;

public class JDBCExample {
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL = "jdbc:mysql://localhost/STUDENTS";
    // Database credentials
    static final String USER = "root";
    static final String PASS = "root";
    public static void main(String[] args) {
        Connection conn = null;
        Statement stmt = null;
        try{
            // Register JDBC driver
            Class.forName("com.mysql.jdbc.Driver");
            // Open a connection
            System.out.println("Connecting to a selected database...");
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            System.out.println("Connected database successfully...");
            // Execute a query for insertion
            System.out.println("Inserting records into the table...");
            stmt = conn.createStatement();
            String sql = "INSERT INTO Registration " +
                "VALUES (100, 'Zara', 'Ali', 18)";
            stmt.executeUpdate(sql);
            sql = "INSERT INTO Registration " +
                "VALUES (101, 'Mahnaz', 'Fatma', 25)";
            stmt.executeUpdate(sql);
            sql = "INSERT INTO Registration " +
                "VALUES (102, 'Zaid', 'Khan', 30)";
            stmt.executeUpdate(sql);
            sql = "INSERT INTO Registration " +
                "VALUES (103, 'Sumit', 'Mittal', 28)";
            stmt.executeUpdate(sql);
            System.out.println("Inserted records into the table...");
            // Execute a query for select
            System.out.println("Creating statement for select query");
            stmt = conn.createStatement();
            String sql1 = "SELECT id, first, last, age FROM Registration";
            ResultSet rs = stmt.executeQuery(sql1);
            // Extract data from result set
            while(rs.next()){
                //Retrieve by column name
                int id = rs.getInt("id");
                int age = rs.getInt("age");
                String first = rs.getString("first");
                String last = rs.getString("last");
                //Display values
                System.out.print("ID: " + id);
                System.out.print(", Age: " + age);
                System.out.print(", First: " + first);
                System.out.println(", Last: " + last);
            }
            // Execute a query for update
            System.out.println("Creating statement for update query");
            stmt = conn.createStatement();
            String sql2 = "UPDATE Registration " +
                "SET age = 30 WHERE id in (100, 101)";
            stmt.executeUpdate(sql2);

            // Now you can extract all the records
            // to see the updated records
            String sql4 = "SELECT id, first, last, age FROM Registration";
            ResultSet rs1 = stmt.executeQuery(sql4);
            while(rs1.next()){
                //Retrieve by column name
                int id = rs1.getInt("id");
                int age = rs1.getInt("age");
            }
        } catch (SQLException se) {
            // Handle errors for JDBC
            se.printStackTrace();
        } catch (Exception e) {
            // Handle errors for Class.forName
            e.printStackTrace();
        } finally {
            // Close resources
            try {
                if (stmt != null) stmt.close();
                if (conn != null) conn.close();
            } catch (SQLException se) {
                se.printStackTrace();
            }
        }
    }
}

```

```

        String first = rs1.getString("first");
        String last = rs1.getString("last");
        //Display values
        System.out.print("ID: " + id);
        System.out.print(", Age: " + age);
        System.out.print(", First: " + first);
        System.out.println(", Last: " + last);
    }
    // Execute a query for delete
    System.out.println("Creating statement for delete");
    stmt = conn.createStatement();
    String sql3 = "DELETE FROM Registration " +
        "WHERE id = 101";
    stmt.executeUpdate(sql3);
    // Now you can extract all the records
    // to see the remaining records
    String sql5 = "SELECT id, first, last, age FROM Registration";
    ResultSet rs2 = stmt.executeQuery(sql5);
    while(rs2.next()){
        //Retrieve by column name
        int id = rs2.getInt("id");
        int age = rs2.getInt("age");
        String first = rs2.getString("first");
        String last = rs2.getString("last");
        //Display values
        System.out.print("ID: " + id);
        System.out.print(", Age: " + age);
        System.out.print(", First: " + first);
        System.out.println(", Last: " + last);
    }
} catch (Exception e){
    e.printStackTrace();
}
}
System.out.println("Goodbye!");
}
}

```

//OUTPUT

```

Connecting to a selected database...
Connected database successfully...
Inserting records into the table...
Inserted records into the table...
Creating statement for select query
ID: 100, Age: 18, First: Zara, Last: Ali
ID: 101, Age: 25, First: Mahnaz, Last: Fatma
ID: 102, Age: 30, First: Zaid, Last: Khan
ID: 103, Age: 28, First: Sumit, Last: Mittal
Creating statement for update query
ID: 100, Age: 30, First: Zara, Last: Ali
ID: 101, Age: 30, First: Mahnaz, Last: Fatma
ID: 102, Age: 30, First: Zaid, Last: Khan
ID: 103, Age: 28, First: Sumit, Last: Mittal
Creating statement for delete
ID: 100, Age: 30, First: Zara, Last: Ali
ID: 102, Age: 30, First: Zaid, Last: Khan
ID: 103, Age: 28, First: Sumit, Last: Mittal
Goodbye!

```