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| **Problem Statement: Create a program to connect MySQL/Oracle with a front-end language, enabling database navigation operations such as adding, deleting, and editing records.** |

**Source Code:**

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| package jdbcconn;  import java.sql.\*;  public class jdbccon {  public static void main(String[] args) {  String JDBC\_DRIVER = "com.mysql.cj.jdbc.Driver"; // Updated driver  String DB\_URL = "jdbc:mysql://localhost:3306/student";  String USER = "root";  String PASS = "Sanket!2";  Connection conn = null;  Statement stmt = null;  try {  // STEP 2: Register JDBC driver  Class.*forName*(JDBC\_DRIVER);  // STEP 3: Open a connection  System.***out***.println("Connecting to database...");  conn = DriverManager.*getConnection*(DB\_URL, USER, PASS);  System.***out***.println("Connected successfully...");  // STEP 4: Execute a query to insert records into the 'stud' table  System.***out***.println("Inserting records into the table...");  stmt = conn.createStatement();  String sql = "INSERT INTO stud (name, id, age, fees\_pending) " +  "VALUES ('abc', 100, 18, 5000)";  stmt.executeUpdate(sql);  sql = "INSERT INTO stud (name, id, age, fees\_pending) " +  "VALUES ('xyz', 101, 25, 3000)";  stmt.executeUpdate(sql);  sql = "INSERT INTO stud (name, id, age, fees\_pending) " +  "VALUES ('rgs', 102, 30, 1000)";  stmt.executeUpdate(sql);  sql = "INSERT INTO stud (name, id, age, fees\_pending) " +  "VALUES ('mko', 103, 28, 0)";  stmt.executeUpdate(sql);  System.***out***.println("Inserted records into the table...");  // STEP 5: Execute a query to select data from the 'stud' table  String selectSql = "SELECT id, name, age, fees\_pending FROM stud";  ResultSet rs = stmt.executeQuery(selectSql);  // STEP 6: Extract data from result set  while (rs.next()) {  // Retrieve by column name  int id = rs.getInt("id");  String name = rs.getString("name");  int age = rs.getInt("age");  int feesPending = rs.getInt("fees\_pending");  // Display values  System.***out***.print("ID: " + id);  System.***out***.print(", Name: " + name);  System.***out***.print(", Age: " + age);  System.***out***.println(", Fees Pending: " + feesPending);  }  // Close the result set  rs.close();  } catch (Exception e) {  // Handle errors for Class.forName and SQL exceptions  e.printStackTrace();  } finally {  // Finally block used to close resources  try {  if (stmt != null) stmt.close();  if (conn != null) conn.close();  } catch (SQLException se) {  se.printStackTrace();  }  }  }  } |

**OutPut:**

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| Connecting to database...  Connected successfully...  Inserting records into the table...  Inserted records into the table...  ID: 100, Name: abc, Age: 18, Fees Pending: 5000  ID: 101, Name: xyz, Age: 25, Fees Pending: 3000  ID: 102, Name: rgs, Age: 30, Fees Pending: 1000  ID: 103, Name: mko, Age: 28, Fees Pending: 0 |