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1  import java.sql.*;
2
3  public class JDBCCConnectionDemo {
4
5      public static void main(String[] args) {
6          // Database URL, username and password
7          String jdbcURL = "jdbc:mysql://localhost:3306/sampledb";
8          String username = "javauser";
9          String password = "123";
10
11         Connection connection = null;
12
13         try {
14             // Step 1: Load JDBC driver (optional for newer versions)
15             Class.forName("com.mysql.cj.jdbc.Driver");
16
17             // Step 2: Establish connection
18             connection = DriverManager.getConnection(jdbcURL, username, password);
19             System.out.println("Connected to database successfully!");
20
21             // Step 3: Verify connection properties
22             DatabaseMetaData metaData = connection.getMetaData();
23             System.out.println("Database Product Name: " + metaData.getDatabaseProductName());
24             System.out.println("Database Product Version: " + metaData.getDatabaseProductVersion());
25             System.out.println("Driver Name: " + metaData.getDriverName());
26             System.out.println("Driver Version: " + metaData.getDriverVersion());
27
28             // Step 4: Query a sample table to test (optional)
29             Statement statement = connection.createStatement();
30             ResultSet rs = statement.executeQuery("SELECT NOW() AS current_time");
31             if (rs.next()) {
32                 System.out.println("Current DB Time: " + rs.getString("current_time"));
33             }
34             rs.close();
35             statement.close();
36
37         } catch (ClassNotFoundException e) {
38             System.out.println("JDBC Driver not found. Include it in your library path.");
39             e.printStackTrace();
40         } catch (SQLException e) {
41             System.out.println("Database connection failed.");
42             e.printStackTrace();
43         } finally {
44             // Step 5: Close connection
45             try {
46                 if (connection != null && !connection.isClosed()) {
47                     connection.close();
48                     System.out.println("Connection closed.");
49                 }
50             } catch (SQLException e) {
51                 System.out.println("Error closing connection.");
52                 e.printStackTrace();
53             }
54         }
55     }
56 }
57

```

```

PS C:\Users\NoelM\Downloads\IBM Consulting\TECHADemy\Phase 3\6. JDBC Training - Java Database Connectivity Course\Assignments\Problem Statement 1> java -cp ".\;mysql-connector-j-9.3.0.jar" JDBCCConnectionDemo
Connected to database successfully!
Database Product Name: MySQL
Database Product Version: 8.0.40
Driver Name: MySQL Connector/J
Driver Version: mysql-connector-j-9.3.0 (Revision: 20ef8ee9eb4294a03858acccea0ddad3525f1ff9)
Database connection failed.
java.sql.SQLException: You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'current_time' at line 1
    at com.mysql.cj.jdbc.exceptions.SQLExceptionsMapping.createSQLException(SQLException.java:112)
    at com.mysql.cj.jdbc.exceptions.SQLExceptionsMapping.translateException(SQLExceptionsMapping.java:114)
    at com.mysql.cj.jdbc.StatementImpl.executeQuery(StatementImpl.java:1312)
    at JDBCCConnectionDemo.main(JDBCCConnectionDemo.java:30)
Connection closed.

```