**DATABASE MANAGEMENT WEEK 8 ASSIGNMENT**

# Identify the role of Driver Manager.

* + The main purpose of the *driver manager* is to stack the Java Database connectivity drivers and move Java Database connectivity function calls from the application to the correct driver.
  + The driver manager also handles the initialization of Java Database connectivity.
  + It is responsible to log all function calls.
* Further the driver manger is accountable for basic error checking.

# Create a schema Employee with relevant attributes in SQL. (a)Create a JDBC program which Includes the required package (b) Enter the code to create a connection and statement. (c)Include JDBC methods throw SQLException. (d)Load the MySQL DriverManager (e) Perform a Database Query and View Results of Employee Database.

import java.sql.\*;

public class FirstnameExample {

static final String DB\_URL = "jdbc:mysql://localhost/Sindhu"; static final String USERNAME = "sindhu";

static final String PASSWORD = "sindhu123";

static final String QUERY = "SELECT id, firstname, lastname, age FROM EMP";

public static void main(String[] args) {

// Open a connection

try(Connection conn = DriverManager.getConnection(DB\_URL, USERNAME, PASSWORD ); Statement stmt = conn.createStatement();

ResultSet rs = stmt.executeQuery(QUERY);) {

// Extract data from result set while (rs.next()) {

// Retrieve by column name System.out.print("ID: " + rs.getInt("id"));

System.out.print(", Age: " + rs.getInt("age")); System.out.print(", Firstname: " + rs.getString("firstname")); System.out.println(", Lastname: " + rs.getString("lastname"));

}

} catch (SQLException e) { e.printStackTrace();

}

}

}

# What type of package is used in JDBC to include Exception?\

* Java.sql.BatchUpdateException
* java.sql.SQLException
* java.sql.DataTruncation
* java.sql.SQLWarning

1. **"PreparedStatement" is a valid statement in JDBC. Justify**

PreparedStatement Interface: Over a generic statement interface PreparedStatement Interface provides additional functionality. Unlike Statement interface this interface allowed o pass parameters inside the method.

Eg: PreparedStatement stmt = null;

String SQL = "Update Emp SET salary = ? WHERE age = ?"; stmt = conn.prepareStatement(SQL);

stmt.close();