Week 10 : Programming Assignment 3

Due on 2025-04-03, 23:59 IST

Connect to a SQLite Database Using JDBC

Once a JDBC driver is available, the next step is to establish a connection to a database.
In this task, your job is to connect to a **SQLite database** using the correct JDBC method.

Java provides the class `DriverManager` with a method `getConnection(String url)` to establish the connection.

Your task is to complete the program by writing **one line** that uses `DriverManager.getConnection(...)` to connect to the database.

You are not required to write any SQL queries or manage database content.
The focus is on learning how to establish a basic JDBC connection.

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1		true	true\n	Passed

The due date for submitting this assignment has passed.
1 out of 1 tests passed.
You scored 100.0/100.

Assignment submitted on 2025-03-26, 22:34 IST

Your last recorded submission was :

```java
import java.sql.*; // Required for JDBC classes like Connection and DriverManager

public class W10_P3 {
    public static void main(String[] args) {
        try {
            // Set up a Connection reference to hold the database connection
            Connection conn = null;

            // JDBC URL string pointing to the SQLite database path
            String DB_URL = "jdbc:sqlite:/tempfs/studentdb";

            // This line sets a temporary directory for SQLite to avoid permission issues
            System.setProperty("org.sqlite.tmpdir", "/tempfs");
conn = DriverManager.getConnection(DB_URL);
// If the connection is successful, conn.isValid(1) will return true
            System.out.println(conn.isValid(1));

            // Always close the connection after use
            conn.close();
        } catch (Exception e) {
            System.out.println(e);
        }
    }
}
```

Sample solutions (Provided by instructor)

```java
import java.sql.*; // Required for JDBC classes like Connection and DriverManager

public class W10_P3 {
    public static void main(String[] args) {
        try {
            // Set up a Connection reference to hold the database connection
            Connection conn = null;

            // JDBC URL string pointing to the SQLite database path
            String DB_URL = "jdbc:sqlite:/tempfs/studentdb";

            // This line sets a temporary directory for SQLite to avoid permission issues
            System.setProperty("org.sqlite.tmpdir", "/tempfs");
// This line establishes a connection to the SQLite database using the JDBC URL.
// DriverManager.getConnection(...) returns a Connection object if successful.
// We pass the variable DB_URL which holds the database location.
// This is a standard JDBC pattern used in real-world applications.
conn = DriverManager.getConnection(DB_URL);
// If the connection is successful, conn.isValid(1) will return true
            System.out.println(conn.isValid(1));

            // Always close the connection after use
            conn.close();
        } catch (Exception e) {
            System.out.println(e);
        }
    }
}
```