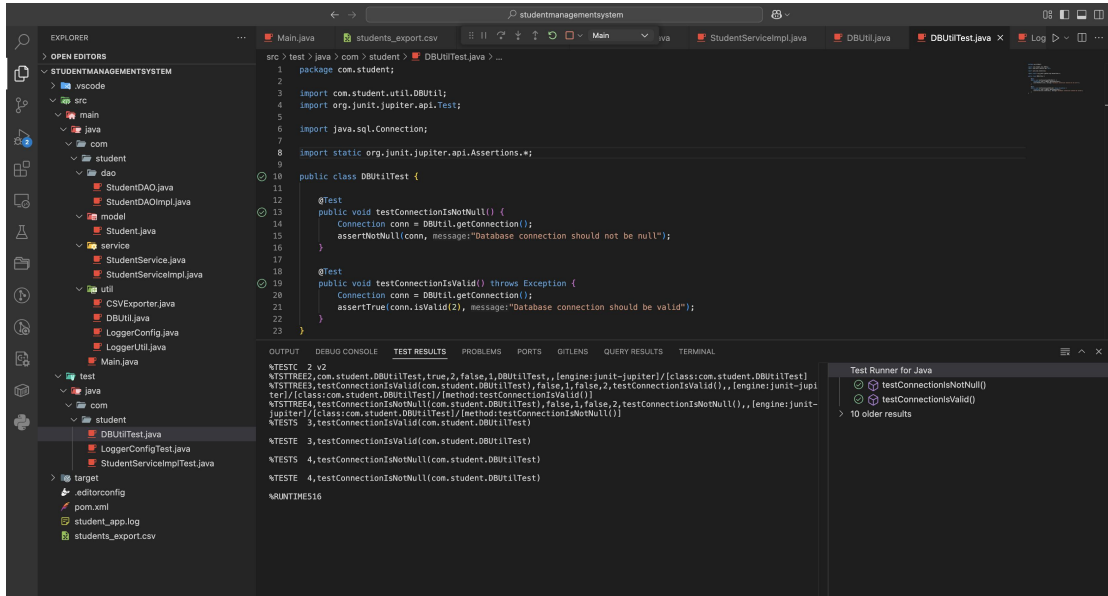


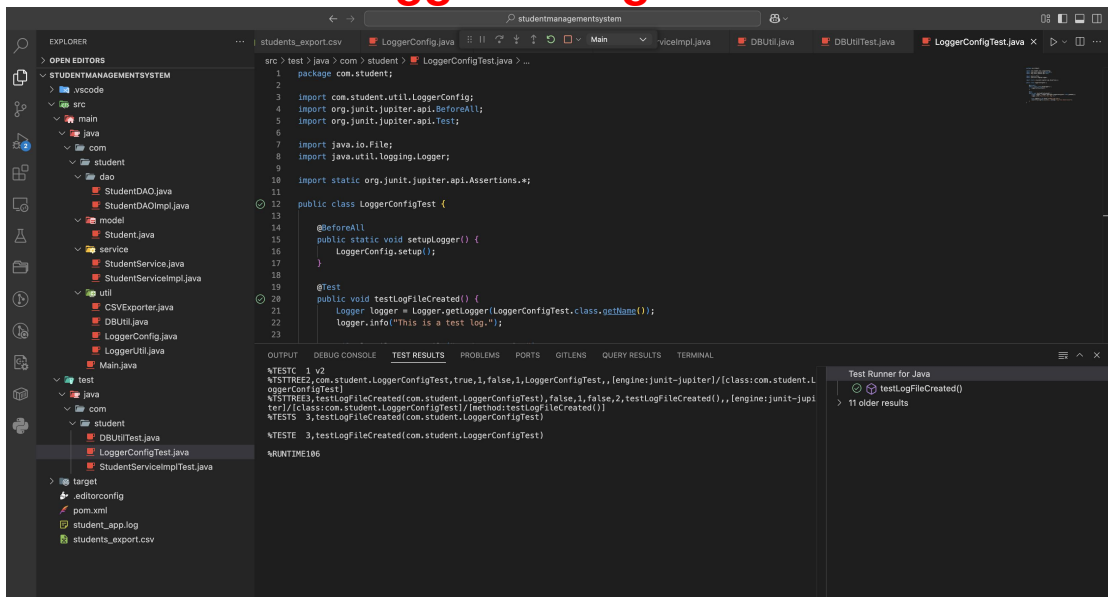
Week -4

Test cases

Test-1 DBUtil-Test



Test-2 LoggerConfig -Test



Test -3

StudentServiceImpl-Test

The screenshot shows an IDE with the following components:

- EXPLORER:** Displays the project structure. The 'test' folder is expanded, showing 'StudentServiceImplTest.java'.
- EDITOR:** Shows the code for 'StudentServiceImplTest.java'. The code includes imports for 'com.student', 'org.junit.jupiter.api', and 'java.util.List'. It defines a 'StudentServiceImplTest' class with a 'setUp()' method and a 'testAddStudent()' method. The 'testAddStudent()' method uses 'assertEquals()' to verify the result of 'StudentServiceImpl.addStudent()'.
- TEST RESULTS:** Displays the test results for 'StudentServiceImplTest'. The results show that all tests passed, with a total of 12 test results.

```
1 package com.student;
2
3 import com.student.model.Student;
4 import com.student.service.StudentService;
5 import com.student.service.StudentServiceImpl;
6 import org.junit.jupiter.api.*;
7
8 import java.util.List;
9
10 @TestMethodOrder(MethodOrderer.OrderAnnotation.class)
11 public class StudentServiceImplTest {
12
13     private static StudentService service;
14
15     @BeforeAll
16     public static void setUp() {
17         service = new StudentServiceImpl();
18     }
19
20     @Test
21     @Order(1)
22     public void testAddStudent() {
23         Student student = new Student(101, "John Doe", "john@example.com", "Math", "A+");
24
25         assertEquals("Student added successfully", true, service.addStudent(student));
26     }
27 }
```

Test Results:

- Test Runner for Java
- testAddStudent()
- testDeleteStudent()
- testUpdateStudent()
- 12 older results

OUTPUT

```

(base) admin@admins-MacBook-Pro: studentmanagementsystem % cd /Users/admin/Desktop/java/studentmanagementsystem ; /usr/bin/env /Library/Internet\ Plug-Ins/JavaAppletPlugin.plugin/Contents/Home/bin/java -cp /var/folders/g6/2126bftj4hlbl9_gk3vtvv900000gn/T/cp_86n5kwdpt4br4sqzgeq4bxmp6.jar com.student.Main
-- Student Management System --
1. Add Student
2. View All Students
3. Update Student
4. Delete Student
5. Export to CSV
6. Exit
Enter your choice: 2
Jul 05, 2025 8:46:32 PM com.student.util.DBUtil <clinit>
INFO: JDBC Driver loaded successfully.
Jul 05, 2025 8:46:33 PM com.student.util.DBUtil getConnection
INFO: Database connection created.
Jul 05, 2025 8:46:33 PM com.student.dao.StudentDAOImpl getAllStudents
INFO: Retrieved all students. Count: 4
Student [ID=1, Name=Bhavani, Email=zprasad@gmail.com, Course=maths, Grade=A]
Student [ID=2, Name=nani, Email=nani@gmail.com, Course=java, Grade=A]
Student [ID=4, Name=vamsi, Email=vamsi2@gmail.com, Course=social, Grade=A]
Student [ID=5, Name=Kiran, Email=kiran@gmail.com, Course=upsc, Grade=A]
Jul 05, 2025 8:46:33 PM com.student.Main main
INFO: Displayed all students.

-- Student Management System --
1. Add Student
2. View All Students
3. Update Student
4. Delete Student
5. Export to CSV
6. Exit
Enter your choice: 1
Enter ID: 3
Enter Name: konik
Enter Email: konik@gmail.com
Enter Course: scala
Enter Grade (A+, A, B+, B, C, D, F): A+
Jul 05, 2025 8:47:06 PM com.student.util.DBUtil getConnection
INFO: Database connection created.
Jul 05, 2025 8:47:06 PM com.student.dao.StudentDAOImpl addStudent
INFO: Student added successfully: ID = 3
Jul 05, 2025 8:47:06 PM com.student.Main main
INFO: Student added: Student [ID=3, Name=konik, Email=konik@gmail.com, Course=scala, Grade=A+]

-- Student Management System --
1. Add Student
2. View All Students
3. Update Student
4. Delete Student
5. Export to CSV
6. Exit
Enter your choice: 5
Jul 05, 2025 8:47:09 PM com.student.util.DBUtil getConnection
INFO: Database connection created.
Jul 05, 2025 8:47:09 PM com.student.util.CSVExporter exportToCSV
INFO: Student data exported successfully to students_export.csv

-- Student Management System --
1. Add Student
2. View All Students
3. Update Student
4. Delete Student
5. Export to CSV
6. Exit
Enter your choice: 6
Exiting program.
(base) admin@admins-MacBook-Pro: studentmanagementsystem %

```