SEN 3305 Software Quality Assurance

Assignment 2

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Q1

1.1

Test Case ID Input Expected Output

```
TC_ADD_01 3, 5 8
```

TC_ADD_02 -2, 7 5

1.2

- Once each test case is executed, I will document the Actual Output and compare it to the Expected Output.
- The outcomes will be recorded in a Test Execution Report with fields like Test Case ID, Input, Expected Output, Actual Output, and Status (Pass/Fail).
- If the actual result equals the expected one, it will be marked as Pass; otherwise, as Fail.
- Any discovered issues will also be logged in a Defect Report for further tracking and resolution.

Q2

2.1

The selected test design technique is **Equivalence Class Partitioning**.

2.2

Test Input Reason

200151 Valid 6-digit numeric PIN

20015 Invalid: fewer than 6 digits

20010516 Invalid: more than 6 digits

2.3

- Equivalence Class Partitioning categorizes inputs into groups of valid and invalid values.
- This method works well here because the requirement clearly specifies constraints exactly 6-digit numeric PINs.
- By choosing one valid example and two invalid ones (one too short, one too long), we can effectively test both valid and invalid conditions without covering every possibility.
- This leads to thorough testing with fewer cases, saving time while ensuring accuracy.

Q3

3.1

- **Step 1:** Open the application and access the login interface.
- **Step 2:** Input the correct username (user1) and password (pass123) into their respective fields.
- **Step 3:** Press the Login button to proceed.

3.2

I would add a verification step in the script that confirms a successful login by checking one of the following:

- Looking for a welcome message (e.g., "Welcome, user1"),
- Ensuring that the dashboard page is displayed (URL such as /dashboard), or
- Verifying that a logout button appears.

The script would use an assertion to confirm one of these indicators. If the condition holds true, the login is successful; otherwise, the script will indicate a failure.