**Assignment Description:**

The main objective of this assignment is to develop a set of tests for an existing triangle classification program.

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**Summary:**

**Summary of Results:**

The test cases were decided to be done once all the major functionality of the classify\_triangle() function are tested. This assignment helped me in understanding the functionality of the program better.

|  | **Test Run 1** | **Test Run 2** |
| --- | --- | --- |
| **Test Planned** | 6 | 8 |
| **Test Executed** | 6 | 8 |
| **Test Passed** | 2 | 8 |
| **Defects Found** | 7 | 0 |
| **Defects Fixed** | 7 | 0 |

**Honor Pledge:**

**I have done this assignment on my own and haven’t copied from others or from the internet.**

**Results:**

**Part 1: Testing the initial buggy code.**Initially, all the test cases failed because of an error in the function. The condition says to return InvalidInputs when b<=b which is every input instance.

| **Test ID** | **Input** | **Expected Results** | **Actual Result** | **Pass or Fail** |
| --- | --- | --- | --- | --- |
| **TC-01** | (1,1,1) | **‘Equilateral’** | **‘Not A Trianlge’** | **Fail** |
| **TC-02** | (3,4,5) | ‘Right’ | ‘Invalid Input’ | **Fail** |
| **TC-03** | (1,2,3) | ‘Scalene’ | ‘Invalid Input’ | **Fail** |
| **TC-04** | (2,2,1) | ‘Isosceles’ | ‘Not A Triangle’ | **Fail** |
| **TC-05** | (0,300,2) | ‘InvalidInput’ | ‘InvalidInput’ | **Pass** |
| **TC-06** | (-1,20,1) | ‘InvalidInput’ | ‘InvalidInput’ | **Pass** |

**Part 2: Testing the improvised code.**

| **Test ID** | **Input** | **Expected Results** | **Actual Result** | **Pass or Fail** |
| --- | --- | --- | --- | --- |
| **TC-01** | (1,1,1) | ‘Equilateral’ | ‘Equilateral’ | **Pass** |
| **TC-02** | (3,4,5) | ‘Right’ | ‘Right’ | **Pass** |
| **TC-03** | (8,7,9) | ‘Scalene’ | ‘Scalene’ | **Pass** |
| **TC-04** | (2,2,1) | ‘Isosceles’ | ‘Isosceles’ | **Pass** |
| **TC-05** | (0,300,2) | ‘InvalidInput’ | ‘InvalidInput’ | **Pass** |
| **TC-06** | (-1,20,1) | ‘InvalidInput’ | ‘InvalidInput’ | **Pass** |
| **TC-07** | (2,7,4) | ‘NotATrianlge’ | ‘NotATrianlge’ | **Pass** |
| **TC-08** | (1,1,2) | ‘Isosceles’ | ‘Isosceles’ | **Pass** |