

Test Report

1. Assignment Description: The objective of this assignment is for you to (a) develop a set of tests for an existing triangle classification program, (b) use those tests to find and fix defects in that program, and (c) report on your testing results for the Triangle problem
2. Author: Shengping Xu
3. Summary: In this assignment, I have fixed the bugs existing in the Triangle.py file and add more effective test cases in the TestTriangle.py file.
4. Reflection: After doing this assignment, I have learned the importance of using automatic testing in the development process which can greatly reduce the effort in the testing process.
5. Honor Pledge: I pledge my honor that I did this assignment all by myself without cheating.
6. Detailed Results:

a) The test results of the original Triangle.py file:

Test ID	Input	Expected Result	Actual Result	Pass or Fail
1	3, 4, 5	Right	InvalidInput	Fail
2	5, 3, 4	Right	InvalidInput	Fail
3	1, 1, 1	Equilateral	InvalidInput	Fail
4	-1, 1, 1	InvalidInput	InvalidInput	Pass
5	201, 1, 1	InvalidInput	InvalidInput	Pass
6	1, 2, 10	NotATriangle	InvalidInput	Fail
7	4, 5, 5	Isoceles	InvalidInput	Fail
8	4, 5, 6	Scalene	InvalidInput	Fail

b) The test results of the improved Triangle.py file

Test ID	Input	Expected Result	Actual Result	Pass or Fail
1	3, 4, 5	Right	Right	Pass
2	5, 3, 4	Right	Right	Pass
3	1, 1, 1	Equilateral	Equilateral	Pass
4	-1, 1, 1	InvalidInput	InvalidInput	Pass

5	201, 1, 1	InvalidInput	InvalidInput	Pass
6	1, 2, 10	NotATriangle	NotATriangle	Pass
7	4, 5, 5	Isoceles	Isoceles	Pass
8	4, 5, 6	Scalene	Scalene	Pass

c) Assignment Summary:

To make sure that I have a sufficient number of test cases, I have added inputs that can lead to all possible results. If all the possible results can be outputted correctly, then I can consider that the program has passed the test.

	Test Run 1	Test Run 2
Tests Planned	8	8
Tests Executed	8	8
Tests Passed	2	8
Defects Found	5	0
Defects Fixed	5	0