HW 02a - Testing a legacy program and reporting on testing results

Assignment Description: Testing a legacy program and reporting on testing results

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3. **Summary**:

This assignment has given me an experience to go through a defective program and correct it based on the test cases. In this assignment we are running testcases using unittest from test_triangle.py python script which calls classify_triangle function from Triangle.py python script. In test_triangle.py, 3,4,5; 5,3,4; 1,1,1; 201,201,201; 3.0,4.0,5.0; 3.0,4.0,5.0; -2,5,10; 5,2,10; and s1,s2,s3 are given as input. The user rectifies the Triangle.py script so that all the cases comes as expected. Please go through the tables given below:

This table describes the program before making changes.

Test ID	Input	Expected Results	Actual Results	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	201,201,201	InvalidInput	InvalidInput	Pass
5	3.0,4.0,5.0	InvalidInput	InvalidInput	Pass
6	-2,5,10	InvalidInput	InvalidInput	Pass
7	5,2,10	InvalidInput	NotATriangle	True
8	s1,s2,s3	Error	Error	Type Error

This table describes the program before after changes.

Test ID	Input	Expected Results	Actual Results	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	201,201,201	InvalidInput	InvalidInput	Pass
5	3.0,4.0,5.0	InvalidInput	InvalidInput	Pass
6	-2,5,10	InvalidInput	InvalidInput	Pass
7	5,2,10	NotATriangle	NotATriangle	Pass
8	s1,s2,s3	Error	InvalidInput	Pass

Description of the Strategy

	Test Case 1	Test Case 2
Tests Planned	testRightTriangleA testRightTriangleB testEquilateralTriangles testInvalidInput testdecimalsides testnegativeinput testnotatriangle teststringinput	testRightTriangleA testRightTriangleB testEquilateralTriangles testInvalidInput testdecimalsides testnegativeinput testnotatriangle teststringinput
Tests Executed	testRightTriangleA testRightTriangleB testEquilateralTriangles testInvalidInput testdecimalsides testnegativeinput testnotatriangle teststringinput	testRightTriangleA testRightTriangleB testEquilateralTriangles testInvalidInput testdecimalsides testnegativeinput testnotatriangle teststringinput
Test Passed	testInvalidInput testdecimalsides testnegativeinput	testRightTriangleA testRightTriangleB testEquilateralTriangles testInvalidInput testdecimalsides testnegativeinput testnotatriangle

Defects Found	"if a <= 0 or b <= b or c <= 0:"@line 36 "if (a >= (b - c)) or (b >= (a - c)) or (c >= (a + b)):"@line 48 "if a == b and b == a:"@line 52 "if ((a * 2) + (b * 2)) == (c * 2):"@line 54 "elif (a != b) and (b != c) and (a != b):"@line 56	None
Defects Fixed	"if a <= 0 or b <= 0 or c <= 0:"@line 36 "if (a >= (b + c)) or (b >= (a + c)) or (c >= (a + b)):"@line 48 "if a == b and b == c and c == a:"@line 52 "elif (((a ** 2) + (b ** 2)) == (c ** 2)) or (((b ** 2) + (c ** 2)) == (a ** 2)) or (((a ** 2) + (c ** 2)) == (b ** 2)):"@line 54 "elif (a != b) and (b != c) and (a != c):"@line 56	None

5. **Honor pledge:** I pledge that all the work done are done by me.