Assignment Description:
The objective of this assignment is to develop tests for the current triangle classification program and use these tests to find and fix defects in the program

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Summary:
Originally only 3 of my 16 test cases had passed. The errors of the original code had made it so no matter the input the code would return InvalidInput, so all of my tests that looked for invalid inputs passed on my first run. After this initial run I found at least 5 issues with the code and was able to make the necessary changes in order to fix the code. On my second run all of my test cases passed successfully.

	Test Run 1	Test Run 2
Tests Planned	16	16
Tests Executed	16	16
Tests Passed	3	16
Defects Found	5	0
Defects Fixed	0	5

I learned efficient ways of testing my code and properly logging my results for future usage. I had some issues with figuring out the initial defects for the Triangle code but were overcome quickly.

Pledge:
I pledge my honor that I have abided by the Stevens Honor System.

Results:
I designed my 16 test cases for the sake of procedurally testing how to get proper outputs from certain inputs. I tried testing inputs that should return Right, Equilateral, InvalidInput, NotATriangle, Scalene, and Isoceles in that order. Right triangles should adhere to the formula a^2 + b^2 = c^2. Equilateral triangles should have all equal inputs. InvalidInput means that one or more inputs are either 0, over 200 or are negative values. NotATriangle means that one input is equal to the sum of the other two inputs. Scalene triangles should have none of their inputs be equal

to one another and do not adhere to the rules of the other triangles. Isoceles triangles should have only two inputs equal to one another.

Initial Tests:

Test ID	Input	Expected Results	Actual Result	Pass or Fail
RightTriangleA	3, 4, 5	Right	InvalidInput	Fail
RightTriangleB	5, 3, 4	Right	InvalidInput	Fail
EquilateralTriangleA	1, 1, 1	Equilateral	InvalidInput	Fail
EquilateralTriangleB	7, 7, 7	Equilateral	InvalidInput	Fail
InvalidInputA	0, 0, 0	InvalidInput	InvalidInput	Pass
InvalidInputB	201, 201, 201	InvalidInput	InvalidInput	Pass
InvalidInputC	-3, -4, -5	InvalidInput	InvalidInput	Pass
NotATriangleA	28, 10, 18	NotATriangle	InvalidInput	Fail
NotATriangleB	7, 5, 12	NotATriangle	InvalidInput	Fail
NotATriangleC	35, 23, 12	NotATriangle	InvalidInput	Fail
ScaleneA	12, 13, 11	Scalene	InvalidInput	Fail
ScaleneB	5, 10, 14	Scalene	InvalidInput	Fail
ScaleneC	91, 32, 74	Scalene	InvalidInput	Fail
IsocelesA	7, 4, 7	Isoceles	InvalidInput	Fail

IsocelesB	9, 9, 5	Isoceles	InvalidInput	Fail
IsocelesC	18, 8, 18	Isoceles	InvalidInput	Fail

Revised Tests:

Test ID	Input	Expected Results	Actual Result	Pass or Fail
RightTriangleA	3, 4, 5	Right	Right	Pass
RightTriangleB	5, 3, 4	Right	Right	Pass
EquilateralTriangleA	1, 1, 1	Equilateral	Equilateral	Pass
EquilateralTriangleB	7, 7, 7	Equilateral	Equilateral	Pass
InvalidInputA	0, 0, 0	InvalidInput	InvalidInput	Pass
InvalidInputB	201, 201, 201	InvalidInput	InvalidInput	Pass
InvalidInputC	-3, -4, -5	InvalidInput	InvalidInput	Pass
NotATriangleA	28, 10, 18	NotATriangle	NotATriangle	Pass
NotATriangleB	7, 5, 12	NotATriangle	NotATriangle	Pass
NotATriangleC	35, 23, 12	NotATriangle	NotATriangle	Pass
ScaleneA	12, 13, 11	Scalene	Scalene	Pass
ScaleneB	5, 10, 14	Scalene	Scalene	Pass
ScaleneC	91, 32,	Scalene	Scalene	Pass

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IsocelesA	7, 4, 7	Isoceles	Isoceles	Pass
IsocelesB	9, 9, 5	Isoceles	Isoceles	Pass
IsocelesC	18, 8, 18	Isoceles	Isoceles	Pass