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Submitted To: Prof. Mukhtiar Zamin

Topic: Test Cases for a triangle that can differentiate between isosceles, equilateral, and scalene

Test Case ID	Test Case Description	Input Data	Expected Outcome	Actual Outcome	Status
TC_01	Equilateral Triangle	Side lengths: 5, 5, 5	True (Equilateral)	True (Equilateral)	Passed
TC_02	Isosceles Triangle	Side lengths: 7, 7, 5	True (Isosceles)	True (Isosceles)	Passed
TC_03	Scalene Triangle	Side lengths: 3, 4, 5	True (Scalene)	True (Scalene)	Passed
TC_04	Not a Triangle (Invalid)	Side lengths: 1, 2, 10	False (Not a Triangle)	False (Not a Triangle)	Passed
TC_05	Invalid Input (Negative Side Length)	Side lengths: -2, 3, 4	False (Invalid Input)	False (Invalid Input)	Passed
TC_06	Invalid Input (Zero Side Length)	Side lengths: 0, 5, 5	False (Invalid Input)	False (Invalid Input)	Passed
TC_07	Isosceles Triangle with Equilateral Properties	Side lengths: 4, 4, 4	True (Isosceles)	True (Isosceles)	Passed
TC_08	Right-angled Scalene Triangle	Side lengths: 3, 4, 5	True (Scalene)	True (Scalene)	Passed
TC_09	Isosceles Triangle with Negative Side Length	Side lengths: 5, -5, 5	False (Invalid Input)	False (Invalid Input)	Passed
TC_10	Isosceles Triangle with Zero Side Length	Side lengths: 0, 5, 5	False (Invalid Input)	False (Invalid Input)	Passed
TC_11	Scalene Triangle with Large Side Lengths	Side lengths: 1000, 2000, 2500	True (Scalene)	True (Scalene)	Passed
TC_12	Equilateral Triangle with Small Side Lengths	Side lengths: 0.1, 0.1, 0.1	True (Equilateral)	True (Equilateral)	Passed
TC_13	Invalid Input (Sum of Two Sides Less Than Third)	Side lengths: 1, 2, 4	False (Not a Triangle)	False (Not a Triangle)	Passed
TC_14	Invalid Input (Sum of Two Sides Equal to Third)	Side lengths: 3, 3, 6	False (Not a Triangle)	False (Not a Triangle)	Passed
TC_15	Invalid Input (Sum of Two Sides Greater Than Third)	Side lengths: 2, 3, 6	False (Not a Triangle)	False (Not a Triangle)	Passed

