Black Box Test Plan

The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C.

Test ID	Description	Expected Results	Actual Results
Testing Equilateral (Dr. Schmidt)	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter side a: **5** Enter side b: **5** Enter side c: **5**	Triangle type based on side lengths: Equilateral	Triangle type based on side lengths: Equilateral
Testing Isoscles	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter side a: **7** Enter side b: **7** Enter side c: **5**	Triangle type based on side lengths: Isoscles	Triangle type based on side lengths: Isoscles
Testing Scalene	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter angle/side a: **7** Enter angle/side b: **10** Enter angle/side c: **5**	Triangle type based on side lengths: Scalene	Triangle type based on side lengths: Scalene
Testing Invalid Triangle b + c>a	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter angle/side a: **1** Enter angle/side b: **10** Enter angle/side c: **12**	Invalid triangle based on side lengths.	Invalid triangle based on side lengths.

Test ID	Description	Expected Results	Actual Results
Testing Invalid Triangle 2 a+b<c	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter angle/side a: **10** Enter angle/side b: **10** Enter angle/side c: **21**	Invalid triangle based on side lengths.	Invalid triangle based on side lengths.
Testing Invalid Triangle Negative Sidelength	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **2** Enter angle/side a: **-100** Enter angle/side b: **10** Enter angle/side c: **5**	Invalid triangle based on side lengths.	Invalid triangle based on side lengths.
Testing Right (Dr. Schmidt)	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle a: **90** Enter angle b: **30** Enter angle c: **60**	Triangle type based on angles: Right	Triangle type based on angles: Right
Testing Acute	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle/side a: **60** Enter angle/side b: **60** Enter angle/side c: **60**	Triangle type based on angles: Acute	Triangle type based on angles: Acute

Test ID	Description	Expected Results	Actual Results
Testing Obtuse	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle/side a: **120** Enter angle/side b: **40** Enter angle/side c: **20**	Triangle type based on angles: Obtuse	Triangle type based on angles: Acute ==**Triangle type based on angles: Obtuse**==
Testing Negative angle	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle/side a: -100 Enter angle/side b: 20 Enter angle/side c: 20	Invalid triangle based on side lengths.	Invalid triangle based on side lengths.
Testing angle sum greater than 180	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle/side a: **100** Enter angle/side b: **70** Enter angle/side c: **30**	Invalid triangle based on side lengths.	Invalid triangle based on side lengths.
Testing Angle sum less than 180	**Preconditions:** `TriangleClassification` program started Enter 1 for angles and 2 for side lengths: **1** Enter angle/side a: **20** Enter angle/side b: **20** Enter angle/side c: **20**	Invalid triangle based on side lengths.	**Triangle type based on angles: Acute** ==Invalid triangle based on side lengths.==