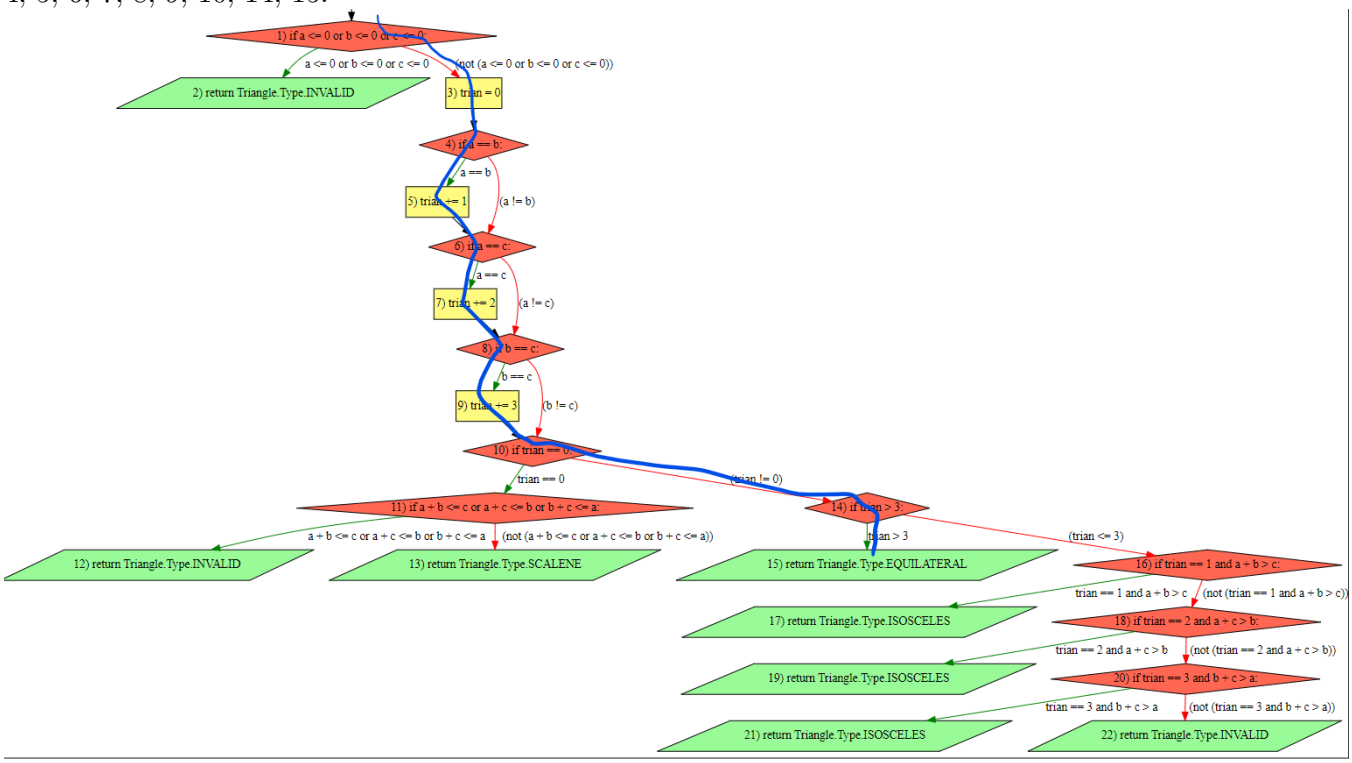
1 Control Flow Graph Normative

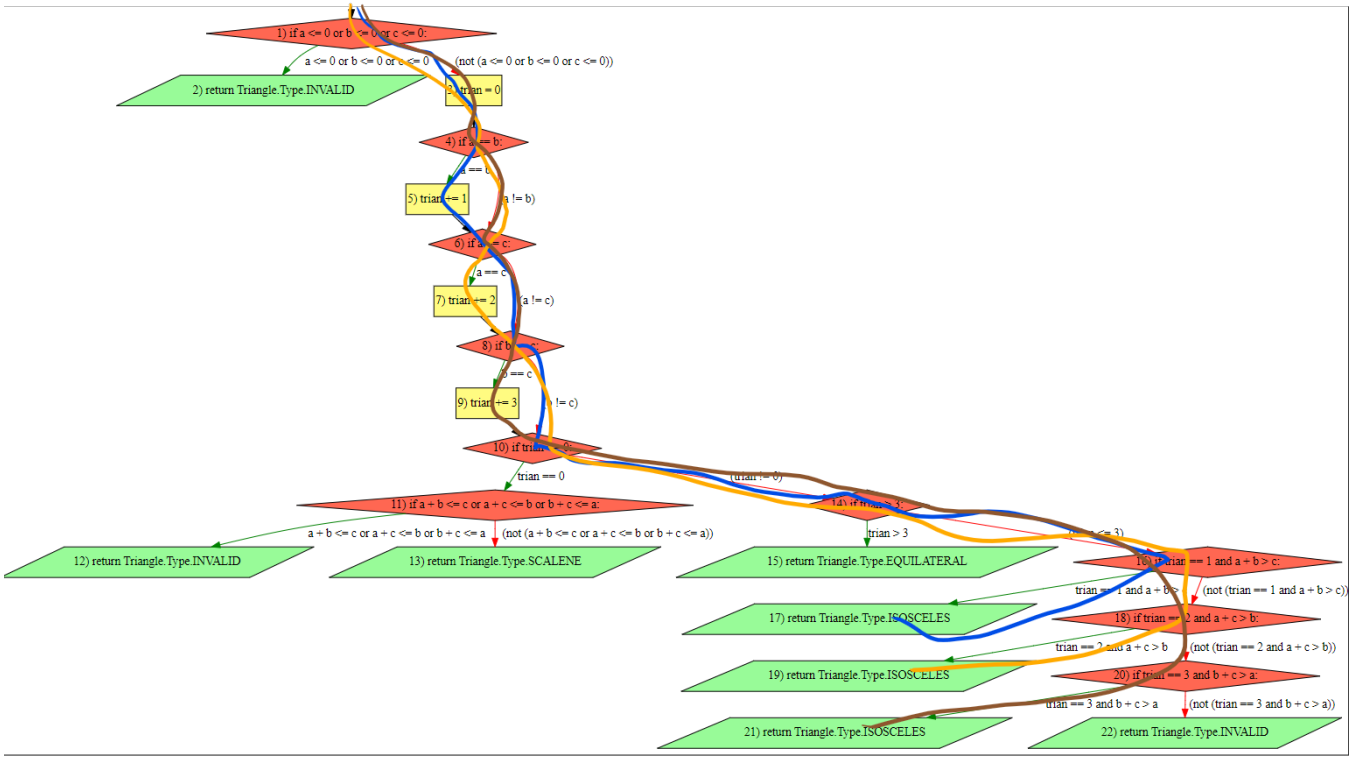
1.1 Equilateral Triangle

For an equilateral triangle, the execution flow starts at the "classify" function, and follows the path: 1, 3, 4, 5, 6, 7, 8, 9, 10, 14, 15.



1.2 Isosceles Triangle

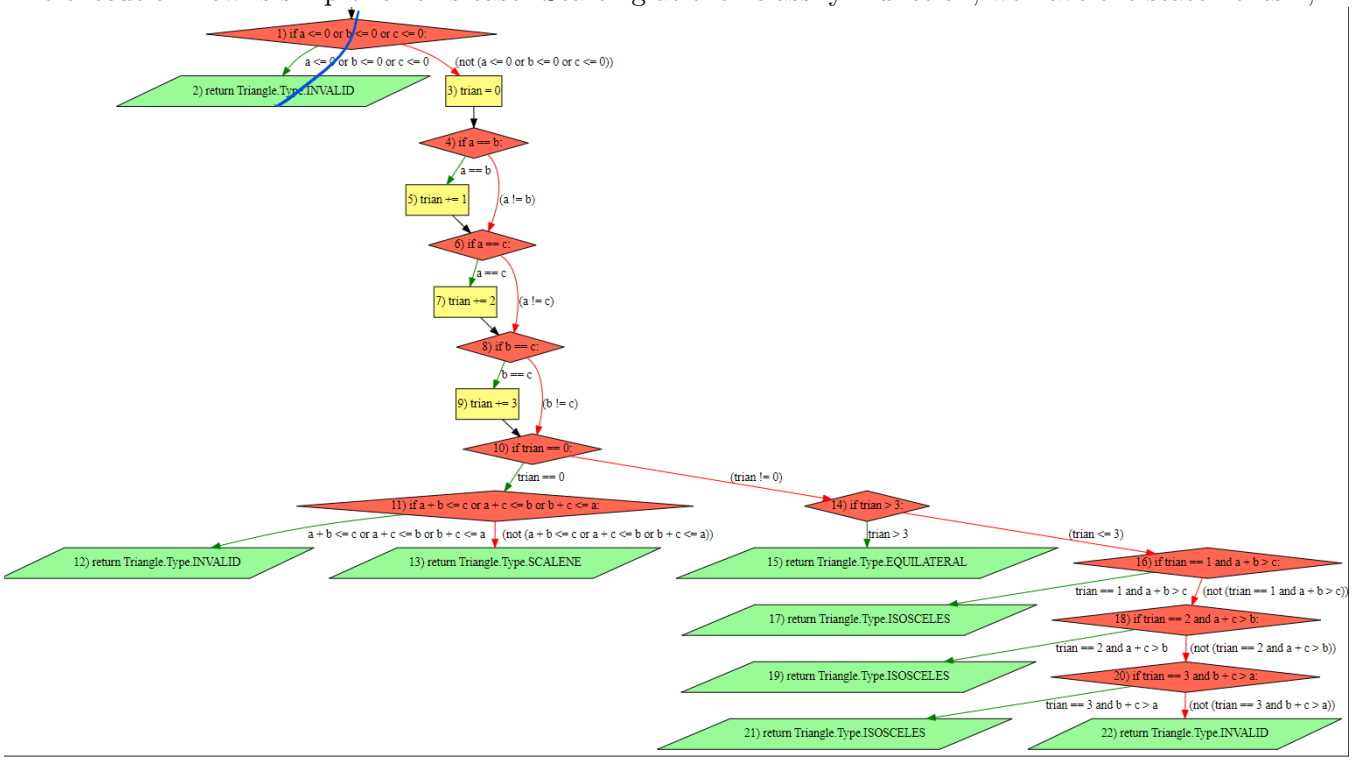
There are three possible execution flows, which all start at the "classify" function.
If a == b: the path is 1, 3, 4, 5, 6, 8, 10, 14, 16, 17.
If a == c: the path is 1, 3, 4, 6, 7, 8, 10, 14, 16, 18, 19.
If b == c: the path is 1, 3, 4, 6, 8, 9, 10, 14, 16, 18, 20, 21.



2 Control Flow Graph Exceptional

2.1 Invalid Sides

The execution flow is simple for this case. Starting at the "classify" function, we have the statements 1, 2.



2.2 Triangle Inequality

There are two possible cases for this, depending on whether two of the sides have the same length or not.
Diff lengths: the path is 1, 3, 4, 6, 8, 10, 11, 12.
Same lengths, if a == b: the path is 1, 3, 4, 5, 6, 8, 10, 14, 16, 18, 20, 22.
Same lengths, if a == c: the path is 1, 3, 4, 6, 7, 8, 10, 14, 16, 18, 20, 22.
Same lengths, if b == c: the path is 1, 3, 4, 6, 8, 9, 10, 14, 16, 18, 20, 22.