

## Question 2 Triangle Verification\Triangle.java

```
1 public class Triangle {
2     private int x;
3     private int y;
4     private int z;
5
6     // Constructor
7     public Triangle(int x, int y, int z) {
8         if (x < 0) {
9             System.out.println("Warning: input x must not be negative!");
10        } else {
11            this.x = x;
12        }
13
14        if (y < 0) {
15            System.out.println("Warning: input y must not be negative!");
16        } else {
17            this.y = y;
18        }
19
20        if (z < 0) {
21            System.out.println("Warning: input z must not be negative!");
22        } else {
23            this.z = z;
24        }
25    }
26
27    // Getters
28    public int getX() {
29        return x;
30    }
31
32    public int getY() {
33        return y;
34    }
35
36    public int getZ() {
37        return z;
38    }
39
40    // Methods
41    public String verify() {
42        if (x + y <= z || x + z <= y || y + z <= x) {
43            return "Not Triangle";
44        } else if (x == y && y == z) {
45            return "Equilateral Triangle";
46        } else if (x == y || x == z || y == z) {
47            return "Isosceles Triangle";
48        } else {
49            return "Scalene Triangle";
50        }
51    }
52 }
53
```