

```
public class Triangle {

    private int side1;
    private int side2;
    private int side3;

        public Triangle(int side1, int side2, int side3)
        {
            if (side1 <= 0 || side2 <= 0 || side3 <= 0)

                throw new IllegalArgumentException ("Sides can only be positive numbers") ;
                this.side1 = side1;
                this.side2 = side2;
                this.side3 = side3;
            }

            public int getSide1( ) {
                return side1;
            }

            public void setSide1(int side1) {
                this.side1 = side1;
            }

            public int getSide2() {
                return side2;
            }

            public void setSide2(int side2) {
                this.side2 = side2;
            }

            public int getSide3() {
                return side3;
            }

            public void setSide3(int side3) {
                this.side3 = side3;
            }
        }
```

```

public boolean isValidTriangle(){

    if ((side1 + side2 > side3) && (side1 + side3 > side2) && (side3 + side2 > side1))
        return true;
    else
        return false;
}

public String getTriType() throws Exception {

    if (isValidTriangle ( ) )
    {
        if ((side1 == side2) && (side2 == side3))
            return "equilateral";
        else if ((side1 == side2) || (side1 == side3) || (side2 == side3))
            return "isosceles";
        else
            return "scalene";
        else

            throw new Exception("The sides don't form a valid triangle.");

    }

}

```