Class Triangle

```
public class Triangle {

	private int side1, side2, side3;

	public Triangle(int side1, int side2, int side3) throws
IllegalArgumentException {
		if(side1 <= 0 || side2 <= 0 || side3 <= 0)
		throw new IllegalArgumentException("Sides cannot be 0 or less!");
		this.side1 = side1;
		this.side2 = side2;
		this.side3 = side3;
	}

	public boolean isValidTriangle(){
return side1+side2 > side3 && side2+side3 > side1 && side1+side3 > side2;
	}

	public String getTriType() throws Exception{
if(!isValidTriangle()) throw new Exception("The triangle is not valid!");
if(side1 == side2 && side2 == side3) return "Equilateral";
else if(side1 == side2 || side1 == side3 || side2 == side3)
return "Isosceles";
else return "Scalene";
	}

}
```

Class Test

```java
import java.util.Scanner;
public class test {
	public static void main(String[] args) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter x: ");
		int x = input.nextInt();
		System.out.print("Enter y: ");
		int y = input.nextInt();

		try{
			int z = x/y;
			System.out.println("x / y = " + z);
		} catch(ArithmeticException e){
			System.out.println(e.getMessage());
		}

		System.out.print("Enter side1, side2, and side3: ");
		int side1 = input.nextInt();
		int side2 = input.nextInt();
		int side3 = input.nextInt();
		try{
			Triangle t1 = new Triangle(side1, side2, side3);
			System.out.println("Triengle type: " + t1.getTriType());
		}catch (IllegalArgumentException e){
			System.out.println("Error creating the triangle!");
			System.out.println(e.getMessage());
		}catch (Exception e){
			System.out.println("Error getting the triangle type!");
			System.out.println(e.getMessage());
		}
	}
}
```