**External Documentation for CPSC 1150 – W05 Lab 2**

**Program:** Validating triangle

File Name: ValidatingTriangle.java

Purpose: Validating triangle using lengths of it’s sides

Input: three sides of triangle user inputs

Output: True or false if triangle validates

**Algorithm**

Validate triangle

START

1. Get length of 3 sides of a triangle
2. Use Boolean (first + second) > third
3. Display result

END

**Sample Input and Output**

Enter the first edge length: 2

Enter the second edge length: 2

Enter the third edge length: 3

Can edges 2.0, 2.0, and 3.0 form a triangle? true

Enter the first edge length: 1

Enter the second edge length: 1

Enter the third edge length: 2

Can edges 1.0, 1.0, and 2.0 form a triangle? false

**Program:** Check a person’s body mass index

File Name: CheckBMI.java

Purpose: To calculate user’s bmi

Input: User’s weight and height

Output: user’s bmi and if they are overweight/ underweight/ normal

**Algorithm**

Calculating bmi and check if user is overweight/ underweight/ normal

START

1. Get user’s weight and height
2. Calculate bmi
3. Use Boolean to check user bmi is overweight/ underweight/ normal
4. Display the result

END

**Sample Input and Output**

Enter your weight in kg: 75

Enter your height in meters: 1.75

Your BMI is normal.

**Program:** Sort three numbers

File Name: SortThreeNumbers.java

Purpose: To sort three numbers

Input: three integers

Output: three integers sorted smallest to largest

**Algorithm**

Sorting integers smallest to largest

START

1. Get three integers
2. Sort integers using boolean
3. Display the result

END

**Sample Input and Output**

Enter the first integer: 68

Enter the second integer 36

Enter the third integer 1

Integers from smallest to largers: 1 36 68