Lab # *4*

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CPSC 1150 - 003

Instructor: H. Darbandi

Lab Title:

Date submitted:, 2022

Department: CSIS

Program: Lab4

File Name: Lab4

Purpose:

To calculate the perimeter and the area of a triangle made from 3 points on a grid

Input: A(xA,yA), B(xB,yB), C(xC,yC),

Output: perimeter, area

Technical Information:

*(You should fill the following information based on compiler and computer you are using).*

IntelliJ IDEA 2022.1.1 (Community Edition)

Build #IC-221.5591.52, built on May 10, 2022

Runtime version: 11.0.14.1+1-b2043.45 aarch64

VM: OpenJDK 64-Bit Server VM by JetBrains s.r.o.

macOS 12.4

GC: G1 Young Generation, G1 Old Generation

Memory: 1024M

Cores: 8

Registry:

ide.balloon.shadow.size=0

Non-Bundled Plugins:

com.chrisrm.idea.MaterialThemeUI (7.5.2.2)

Kotlin: 221-1.6.21-release-337-IJ5591.52

Program Logic (Pseudocode)

Algorithm:

xA <- x of A

yA <- y of A

xB <- x of B

yB <- y of B

xC <- x of C

yC <- y of C

*InvalidMessageOutput*(xA, yA, xB, yB, xC, yC)

if *isLine*(xA, yA, xB, yB, xC, yC) is true then

print(wait this is a line!)

restart()

else

print(Triangle A(xA,yA), B(xB,yB), and C(xC,yC))

print(Perimeter: perimeter(xA, yA, xB, yB, xC, yC))

print(Area. :area(xA, yA, xB, yB, xC, yC))

repeat()

The test cases are created for this lab assignment for learning purpose. We will cover test cases in details later in our class, and you will create your own test cases starting from lab2.

Test case format used in this lab assignment

*purpose*

*input*

*output*

*expected value*

*passed or failed*

Test Cases:

Test case 1:

Output value:

Expected value:

Passed