**Week 7**

**In-class Lab Exercise**

**Complex If’s Lab:**

Write a program that receive two numbers from the user. Assign the user inputted values to bigNumber and littleNumber. If the bigNumber is bigger than littleNumber, see if they are evenly divisible. If they are, see if they are the same number.

**Note**: This program makes use of multiple nested if statements. Display proper messages depending on the condition being true or false.

**Required elements for full credit:**

IPO chart

Algorithm

Source code

Documentation

**Points: 10**

**Due Monday**

**Defining Diagram (IPO Chart):**

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| * int:bigNumber * int:littleNumber | * (if bigNumber >= littleNumber -> if bigNumber % littleNumber == 0 -> if bigNumber == littleNumber) else means littleNumber > bigNumber | * You entered the same number. * The first number you entered is evenly divisible by the second. * You entered a first number larger than the second. * You entered a second number larger than the first. |

**ALGORITHIM**

DECLARE int bigNumber & littleNumber

PRINT asking for a number

STORE in bigNumber

PRINT asking for a number

STORE in littleNumber

(CHECK IF bigNumber >= littleNumber)(if false PRINT littleNumber is larger than bigNumber)

(if true CHECK IF bigNumber % littleNumber == 0)(if false PRINT bigNumber is larger than littleNumber)

(if true CHECK IF bigNumber == littleNumber)

(if true PRINT the numbers are equal)(if false PRINT bigNumber is evenly divisible by littleNumber)

EXIT program