**In class Exercise – February 21, 2019 – Due on February 22 by 11:59pm**

**Objective:** Apply **single if statement, modulus(%),** relational operators

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| **Important instructions:**   * *All programs must include comments at the top of your program: your name,* the class name (CSIT 575)*, program name and* ***the program description (purpose of the program).*** * *Copy and paste your* ***program code*** *and* ***output*** *in Part B of each program. Note: Use snipping tool to snip the output.* * *Once it is done, save and submit this word file via Canvas.* |

1. **Divisible.cpp**

Write a program that prompts the user to enter an integer. The program will check if the number is divisible by 2 or 3 or 4 or 5 and display the message(s).

**Sample run 1**

Enter an integer: 426

426 is divisible by 2.

426 is divisible by 3.

**Sample run 2**

Enter an integer: 756

756 is divisible by 2.

756 is divisible by 3.

756 is divisible by 4.

**Sample run 2**

Enter an integer: 658620

658620 is divisible by 2.

658620 is divisible by 3.

658620 is divisible by 4.

658620 is divisible by 5.

**Part A: Pseudocode**

**Purpose of the program:**

**Input or given data: 2, 3, 4, and 5**

**Processing: integer % 2, integer % 3, integer % 4, integer % 5**

**Output: integer is divisible by 2, integer is divisible by 3, integer is divisible by 4, integer is divisible by 5**

**Part B: Copy and paste your program (source) code and the outputs after this line.**

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//CO SCI 575

//IfInteger.cpp

//Checks if an integer entered by a user is divisible by 2, 3 4, or 5

#include <iostream>

using namespace std;

int main()

{

int integer;

//Asks the user to enter an integer

cout << "Enter an integer: ";

cin >> integer;

//Single Ifs that check if a number is divisible by 2, 3, 4 or 5.

if (integer % 2 == 0)

cout << integer << " is divisible by 2." << endl;

if (integer % 3 == 0)

cout << integer << " is divisible by 3." << endl;

if (integer % 4 == 0)

cout << integer << " is divisible by 4." << endl;

if (integer % 5 == 0)

cout << integer << " is divisible by 5." << endl;

system("Pause");

return 0;

}

**Output 1:**

Enter an integer: 678

678 is divisible by 2.

678 is divisible by 3.

**Output 2:**

Enter an integer: 825

825 is divisible by 3.

825 is divisible by 5.

**Output 3:**

Enter an integer: 3456

3456 is divisible by 2.

3456 is divisible by 3.

3456 is divisible by 4.