**COSC2406**

**Assembly Language Programming**

**Assignment 3**

**Programing General Requirements:**

* Comments are important. All programs must be fully commented on using the format shown throughout class and the textbook in the code examples.
* Submit all your .asm files and running screenshots for questions to Bspace.
* Programs which do not have running screenshots will have a penalty of up to 30%.

1. [15] Write a program that will use five variables having 16-bit integers and the output will be as follows: (2P + R) - (Q - S) - 3T (You cannot use multiplication instruction here because you haven’t learned how to use it yet)
2. [15] Write a program that uses a loop to calculate first twenty values of the Fibonacci number sequence, described by the following formula: Fib (1) = 1, Fib (2) = 1, Fib (n) =Fib (n-1) + Fib (n-2).
3. [10] Use a loop with indirect or indexed addressing to reverse the element of an integer array. Do not copy the elements to another array. Use SIZEOF, TYPE, and LENGTHOF operators to make the program more general and flexible.