**Computer Organization/Assembly Language CSCI3351**

**Assessment Project**

# Objectives of the project

1. To assess your understanding of basic programming structures in assembly language.
2. To assess your knowledge of programming with MASM (Microsoft Macro Assembler) and Visual Studio

# Problem Description & Programs

Write an assembly language program in MASM to perform the following tasks:

Generate the first *N* numbers of the sequence: 0, 1, 1, 2, 4, 7, 13, 24 … ; the sequence is generated as

with seed values 0 , 1, 1.

You will define a DWORD array to store the sequence, and define the following procedures:

1. main: prompt users to enter the length of the sequence *N*; call genSeq to generate the sequence of *N* integers; call sumSeq to calculate the sum of the sequence; call displaySeq to display the sequence and the sum.
2. genSeq: generate the sequence.
3. sumSeq: calculate the sum of the sequence.
4. displaySeq: display the sequence and the sum with a call WriteDec statement.

**A sample of run:**

How many integers in the sequence will be generated?

10

The sequence is:

…

The sum of the sequence is …

# Rubric Attached