[CSCI 231 - Fall 2019] Computer Systems and Organization
Department of Computer Science
School of Engineering and Digital Science

Lab Exercise 1

Submit your work to moodle before the due date

Write a program in MIPS assembly language that computes the first seven values of the ***fibonacci sequence**** and stores those values in memory. Initialize $F_0 = 0$ and $F_1 = 1$. After running your program, the data segment window should show all seven values. **Hint**: Please use an array to store those values. You can initialize your array as "***Fib:*** **.word 0 1** " (that means Fib[0] = 0, Fib[1] = 1) in the **.data** section, and to get the address of this array, use "*la $s0, Fib*" (that means $s0 = addr(Fib[0])) in the **.text** section. The seventh value of fibonacci sequence is $F_6 = 8$.

* The sequence F_n of Fibonacci numbers is defined by the relation:
$F_n = F_{n-1} + F_{n-2}$, with $F_0 = 0$ and $F_1 = 1$.

NOTE:

1. **NO function, NO loop** and **NO print using 'syscall'** (which will be covered in the future assignments). Only data check in the **Data Segment window**. (**HINT**: please refer the Slide 5 ~ 11 in the Ch2 presentation slides)
2. For lab related questions, students may ask questions to **the Lab Forum** on the moodle.
3. **Plagiarism check** will be done after each submission.

Due Date: Exactly 6 days later with **NO extension**
(e.g., for Lab1: Aug. 27 11:30 am ⇒ Sep. 2 11:30 am)

Output: