

**CS330 - Computer Organization & Assembly Language**  
**Assignment # 8 Assembly Bonus**

\*\*\*Individual Work Only\*\*\*

**Problem:**

Write an assembly language program which takes one integer, n, via user input, and prints n number of digits of the Fibonacci sequence. For example:

If the user enters:	The code should print:
1	0
3	0 1 1
5	0 1 1 2 3

- Write at least one function
- Take n via user input (scanf)
- Code should work when  $0 \leq n \leq 40$
- Additional background on the Fibonacci sequence can be found here:  
<https://www.mathsisfun.com/numbers/fibonacci-sequence.html>  
[https://en.wikipedia.org/wiki/Fibonacci\\_number](https://en.wikipedia.org/wiki/Fibonacci_number)

**TURN IN:** Please the following three items inside a .zip file and submit the .zip file

- asgn8.s
- Makefile
- Independent completion form

**RUBRIC:** Correct solutions will result in 100 points added to the overall HW grade

- 50%: Code works correctly
  - Code prints all n digits of the Fib sequence, not just the last digit
  - Code includes at least one function
  - Code takes n as user input
  - Code doesn't hard code the sequence (first two digits are ok to hard code)
  - Code works for  $0 \leq n \leq 100$
- 50%: Document all code.
  - Comments must be thorough and correct but not redundant.
  - Explain both what you're doing and why you're doing it.
- Code that does not compile will result in an automatic zero.
- Missing Makefile, or non-working Makefile is an automatic zero.
- NOTE: Writing C code and converting it into Assembly and submitting the compiler generated Assembly is **STRICTLY PROHIBITED**.