CS264 Project 2
Total points: 100

Submission Instruction: You must run the assembly program using the SPIM simulator. Please zip the following files:

> The assembly program(s) (using file extension .asm) and log files showing the state of SPIM at program completion and the console.
> Readme.txt (you should explain how to run your program.) Also, you need to provide the output of the console window and the saved log after the program finishes executing).

Submit your zip file via Blackboard

Project Specifications:

Write a program in assembly language using the MIPS instruction set to calculate the n^{th} Fibonacci number. **This must be done in an iterative loop.**

Your program will read from input the value of n. Be sure to validate user input and report errors when necessary. n must be a natural number that can not be too large that the value of f(n) cannot be expressed with a 32-bit unsigned integer and can be output to the console in SPIM.

While iterating through this loop, store the value of f(n) in an array. Ths array should be large enough to contain N values (where N is the largest permissible value of n.)

Your program should then output the n^{th} Fibonacci number then output the portion of the sequence stored in the array.

Execute the program for n = 10 and n = 20. Save a complete log file for each execution.