Please print your name!

All the programs shall be run on MARS. Pls email the TA your code. TA: Yuchen Hou, `yhou@eecs.wsu.edu`

1. Write a MIPS program that implements the following function:
   $f(n) = 2f(n-1) + 1;$
   $f(0) = 1.$
   and test your code with $f(3)$ and see if your code computes it correctly.

2. Write a MIPS program that implements the following function:
   $f(n) = 2f(n-1) + 3f(n-2) + 1;$
   $f(0) = 1;$
   $f(1) = 2.$
   and test your code with $f(3)$ and see if your code computes it correctly.

3. Write a MIPS program that implements the following function:
   $f(n) = 2g(n-1) + 1;$
   $g(n) = 3g(n-1) - 1;$
   $g(0) = 1.$
   and test your code with $f(3)$ and see if your code computes it correctly. Your implementation shall first, inside f, call g, then, inside g, recursively call g itself.