240 Fall 2019

MIPS H2 Due: Dec. 12 (no penalty until Dec. 15)

Use only MIPS instructions covered on the link *Integer Instruction Set* or covered in class (no blt, bgt, muli….)

Write a MIPS assembly language program that accomplishes the following tasks:

The program will prompt the user to enter an integer **k** between 1 and 10.
If the entered k is out of range just have the program exit.
Depending on the k value implement the following cases:

case 1: if 1 <= k < 5
Have n (n>= 0) be prompted from the user.
compute Func(n): if (n = 0 or n = 1) then Func(n) = 20
else Func(n) = 5*Func(n-2) + n;
Display a result_message together with the numeric value of the result.
Repeat (meaning prompt the user for n)

case 2: if 5 <= k <= 10
Display a joke.

Your program should be well documented with comments.
Your console output should include helpful prompts for the user.
Save your file as *LastName _h2.s*
Upload the file on Blackboard.

Note: if you don't have the time to implement the entire program, for partial credit (80 out of 100) implement the recursive function of case1.

No cheating and/or plagiarism are allowed