

CS330 - Computer Organization & Assembly Language Assignment # 6

Individual Work Only

Problem:

1. Write a program in C that:
 - (a) Takes user input, an integer, n
 - (b) Includes a function that calculates and prints all the prime numbers from 2 to n:

```
void calcPrimes(int n)
```
2. Then compile that program into Assembly, and **comment every line** to describe what it does
 - Reminder, to compile a C file to Assembly: `gcc -Wall -g -S asgn6.c -o asgn6.s`
 - Also, for those lines that are just Assembler directives (i.e. those that begin with `.cfi__`), you can just make the comment “this line is an Assembler directive”.
 - If you’re not sure what a line means, just take your best guess.
 - Single line comments in Assembly begin with `#`
 - Multiple line comments in Assembly are the same as in C.

TURN IN:

- Asgn6.c containing the function, compilable and documented
- Asgn6.s: the same file compiled to Assembly, with every line commented
- Makefile (that compiles the Assembly file to an executable, can use the template from Lab09)
- Independent completion form
- All in a .zip file

RUBRIC:

- 100%: Document all code
- Code that does not compile will result in an automatic zero.