Math Stuff
EE 312
Due: Thursday 3/14/19 at 10:00 PM

50 points

No mistake. This is the same program that I give the intro students... I guess the only difference is that you have to implement all the functions without using any loops. You may use "helper" functions if you need any...but still no loops.

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You will be implementing the following functions. You may modify the main to test
the functions, but this program will work as a starting point.

//********** Function Prototypes ******************

//function isPrime
//input parameter - positive integer
//returns true if the number is prime, otherwise false
//

bool isPrime (int number);



//function printPrimes
//input parameter - positive integer
//Uses the isPrime method to print a list of prime numbers from 1 to n
(inclusive).

void printPrimes (int n);



//function findFibo
//input parameter - positive integer
//returns the nth fibonacci number where
//Fib(0) -> 0
//Fib(1) -> 1
//Fib(N) -> Fib(N-2) + Fib(N-1)

int findFibo (int n);



//function findFactors
//input parameter - positive integer
//prints the prime factors of the given number to standard output (cout)
//example output: 52=2*2*13 (or 52=1*2*2*13) or 13=prime

void findFactors (int number);
```

NOTES:

- You must do this program by yourself.
- The programs must be done using a Linux environment. Note: Your code must compile and run on kamek.ece.utexas.edu.
- The programs must be modular, with significant work done by functions. Each function should perform a single, well-defined task. When possible, create re-usable functions. Do not write trivial functions such as a function to read a single value from an input file.
- We should be able to read a "readme.txt" file for instructions on how to make and run the program.

Turn in: One zipped file that includes: readme.txt (gives instructions for compiling and running code) and your source program. The makefile should create a executable program named "math_stuff". To make this process work better, zip the files on kamek before you transfer them back to your computer for turnin.

Upload: Turn in one zipped file named prog04math_xxxxx.zip where xxxxxx is your UT EID to Canvas.

Be sure to follow the style standards for the course.

rlp 2/25/19