

Homework 4

Files to submit: **primes.c**

Time it took Matthew to Complete: **15 mins**

- All programs must compile without warnings when using the -Wall and -Werror options
- Submit only the files requested
 - Do **NOT** submit folders or compressed files such as .zip, .rar, .tar, .targz, etc
- Your program must match the output exactly to receive credit.
 - Make sure that all prompts and output match mine exactly.
 - Easiest way to do this is to copy and paste them
- All input will be valid unless stated otherwise
- Print all real numbers to two decimal places unless otherwise stated
- The examples provided in the prompts do not represent all possible input you can receive.
- All inputs in the examples in the prompt are underlined
 - You don't have to make anything underlined it is just there to help you differentiate between what you are supposed to print and what is being given to your program
- If you have questions please post them on Piazza

Restrictions

- No global variables are allowed
- Your main function may only declare variables, call other functions, and assign variables values.
- **The array you create to store your variables should only be long enough to fit only the primes that you are displaying**
- **You should not have a limit on how large N can go for this problem**

For this program you will be finding all of the prime numbers between 2 and N (inclusive). Remember that a number is prime if it is only evenly divisible by itself and 1.

Assumptions

1. Input may not be valid

Hints

1. It might be easier to consider what make a number not prime for this problem.

Examples

1. Enter a number greater than 1: 25
The primes between 2 and 25 are:
2
3
5
7
11
13
17
19
23
2. Enter a number greater than 1: cat
Enter a number greater than 1: dog
Enter a number greater than 1: 1
Enter a number greater than 1: -2
Enter a number greater than 1: 100
The primes between 2 and 100 are:
2
3
5
7
11
13
17
19
23
29
31
37
41
43

47
53
59
61
67
71
73
79
83
89
97