

LAB 12

Disclaimer

I moved out of town this week on monday and spent until Wednesday trying to get ahold of my landlord to turn on my wifi. It didn't get turned on until 11pm Wednesday. I have been trying to get caught up on my 5 classes after starting this week 3 days behind schedule. I have also been sick all week so I'm very congested and my brain is foggy and my hearing is muffled. I get 70% of the way through a thought then my brain shuts off and I restart my train of thought.

Pseudocode

```
# Prompt the user for a number n, from which we will find all the
primes at or below that value.
GET user_num
num_list <- 1 to user_num
bool_list <- length of num_list where each value is True
prime_nums <- []

# Compute the primes at or below n.
FOR i ... user_num/user_num
    IF bool_list[i + 2] = True
        current_i <- num_list[i] * 2
        WHILE current_i <= user_num
            bool_list[] <- False
            current_i = current_i + i

# Place all the primes in an array.
FOR i ... bool_list
    IF bool_list[i] = True
        append num_list[i] to prime_nums

# Display the primes on the screen.
PUT prime_nums
```

Logarithmic efficiency

Probably $O(\log n)$ or something like that if I can get this functioning.

Program Trace

It's not functioning, it's breaking still