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CSC6301 Project 7

**Finding Primes Program Analysis**

After analyzing using cProfile, we can see that the “isPrime” function is what is taking up the most time and making this program/profile run very slowly. This makes sense, because this function has a nested loop, so it is not at all efficient in checking for if a number is prime. Because of this finding, this is the function that we will need to optimize. I got rid of the loops altogether, and used multiple if statements to return Booleans indicating if a number is prime or not. The program ran significantly faster, and this can even be seen in how the cProfile report was produced instantly compared to how long it took in the first version (see below).

A screenshot of a computer

Description automatically generated