Project 2
Practice with Primes

Goal

- Resurrect your C++ skills

Summary

- Develop a program that generates prime numbers

Inputs

- Number of prime numbers to be generated
- Number of columns in the display (see ex2.cpp)

Output

- N columns of prime numbers, where N is the second parameter under “Inputs.”

Behavior

The program will:

- Ask the user how many prime numbers should be generated. Call this P.
- Ask the user how many columns should appear in the display. Call this N.
- Generate the first P prime numbers displayed over N columns as in ex2.cpp.

Other Requirements

- No global variables
- The program is decomposed such that the major work occurs outside of main()
- The program has at least this function:

```
/*
Pre: num is an integer  > 1
Post: returns true if num is prime, false otherwise
*/
bool is_prime(int num)
```

Extra Credit

There is an obvious way to determine if an integer is prime and a much more efficient but less obvious way. +5 if your program uses the less obvious way. There is only one correct answer.