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/*****
*      Author:          Jessica Schuler
*      Date Created:    10-19-13
*      Filename:        l4logic.cpp
*
*      Overview:
*      This program tells if a number is prime
*      Input:
*          The user inputs any whole number
*
*      Output:
*          The output will tell if the number is prime or not
*
*****/
#include <iostream>

#define PROMPT "Please enter a whole number"
#define NOT_PRIME "The number is not a prime number. /n"
#define PRIME "The number is a prime number. /n"
#define DONE 0
#define FIRST_FACTOR 3

using std::cout;
using std::cin;
using std::endl; //added endl to using statements

int main ()
{
    int i;
    float number; /*changed this to a float number not char
                   to properly round*/

    cout << PROMPT; // prompts user
    cin >> number; // user input

    for (i=FIRST_FACTOR; i<number; ++i) //took out division
    {
        cout << i << endl;
        cout << number/(float)i << endl; //divides by i

        /*This is new calc for prime number
        * differnet from original to take into
        * account float numbers so to not round*/

        if (((number/(float)i)-(int)number/i) == 0.0)
        {
            cout << NOT_PRIME << number;
            return DONE;
        }
    }
    cout << PRIME << number; //it is prime if not divisible

    return 0;
}

```