

**CS-182**  
**C++ Program #3**  
**Functions**

**Date Assigned:**      **Wednesday, December 20, 2000**

**Date Due:**            **Thursday, January 11, 2001**

*Note: No class next two weeks due to Christmas break*

Write a C++ program that finds all the prime numbers between 1 and 100 by brute force. The number  $n$  is known to be prime if its only factors are 1 and  $n$ . Furthermore, if  $n$  has additional factors, one of them must be  $\leq \sqrt{n}$ . Write a separate function, called `prime( $i$ )`, which determines if integer  $i$  is (or is not) a prime number. Your function should work on any non-negative integer that is passed into the function. As always, submit your well-commented source code along with a separate report that states how you designed your work to solve the problem.