

CSC 135
Assignment #9
Point value: 20

Program due: Sec 1 Wed, Oct 25
Sec 2 Thurs, Oct 26

The least common multiple (lcm) of two integers, firstnum and secondnum, is the smallest integer into which both firstnum and secondnum each divide equally. For example, the lcm of 10 and 15 is 30.

The greatest common divisor (gcd) of two integers, firstnum and secondnum, is the largest integer that divides both firstnum and secondnum evenly. For example, the gcd of 24 and 32 is 8

The file ~lee/csc135fall00/hw9outline.cpp contains the framework for a program that reads pairs of integers and calls the value returning functions lcm and gcd to find their least common multiple and greatest common divisor. You are to copy the file into your directory and complete the code and documentation required.

Completing the program means that you must finish (including documentation) the lcm and gcd functions. They are value returning functions that expect 2 integer parameters and return an integer result.

The test data for the program will be in ~lee/csc135fall00/hw9data.

Do not forget to adequately document the program and function. Adequate documentation for a function consists of a brief description of its purpose, a statement describing expected input parameters, and a statement describing what value(s) are returned and/or output. Significant variables should also be documented.

NOTE: The framework for this program makes use of a filestream to get input to your program. In order to test the program, copy the hw9data file into your account (keep the same name) and then use a.out to execute the program (not a.out<hw9data).

NEW REQUIREMENT: In order to avoid questions about programs being completed on time, each program assigned from this point on in the semester must be emailed to me (in addition to the hard copy) by the beginning of class on the date the assignment is due. You will email me the source code not your shell file. The mail message must include a subject line indicating your name and the assignment number.

Sample command line to email program:

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mail lee -s "Jane Smith Assignment #9" < hw9.cpp
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