CSC 2111 Lab 17

Objectives:

1. Implement operator overloading.

Related math background:

- The equation of a line:

  $ax+by=c$ is the standard equation for a line, where a and b cannot both be zero, and where a, b, and c are real numbers.

Question:

Download lab17.cpp from the blackboard. In this file, the definition of the class *lineType* has given which represents a line equation. In this lab, you are asked to complete the body for two operators overloading function as following:

1) **Overload the stream extraction operator >>,** for the input stream.
The user input should be in (a,b,c) format where Xcoef=a, Ycoef=b and ConstTerm=c variables for the line object. For example, the code *cin >> line*; should accept (2,3,4) as the line input format.
2) **Overload the assignment operator=,** to assign a line object into another line object.
It will copy all member variables from its right operand to its left operand.
For example, *line1=line2*; will copy all member variables from line2 to the line1 object.

Then, without changing the main function, execute your program to get the same output. Submit a single cpp file.

Output*:*