

## Extra Credit Programming Assignment - Due Monday 1 December

**Problem/Background:** You are a newly hired engineer at Perplex Systems, Inc. Upon arriving at work on your first day, you find the following letter on your desk.

Dear new software engineer:

The file **broken.cpp** contains a computer program written by an employee who has since been promoted to senior vice president of the Widget Division. The use of this program is crucial to our meeting our sales goals for this quarter. Unfortunately, the program does not appear to work properly. Even more unfortunately, the job duties as senior vice president of the Widget Division do not allow time for the former programmer to revise the code or consult on the program.

The program will compile, but produces an error when it is run. The program is supposed to perform the following tasks :

- 1) read in positive and negative integer numbers
- 2) find the average of the positive numbers
- 3) find the average of the negative numbers
- 4) print out these averages
- 5) stop if the user enters the number 9999

Your first task as a new employee with our company is to fix this program so that it operates as intended. Once you have a working program, print out a listing of the program, and an example of the input and output demonstrating proper functionality.

Turn in a copy of your functioning program, printouts showing its operability, and a disk containing the program to my office by Monday 1 December 2003 at 2:00 PM.

Good Luck,  
Winston R. Windbag,  
President  
Perplex Systems, Inc.

**broken.cpp** is available on get12.

## Programming Assignment EC - Evaluation Criteria

Names \_\_\_\_\_

Criteria	Points Available	Points Awarded
Functioning program	30	
OR		
Functioning program that demonstrates everything that you (should) have learned in class about program design	100	
	Total Pts:	/100