## CIS 130 - Intro to Programming <u>Week 13</u> Lab - Wednesday, 04-18-07 Week 13 Lab Exercise

Purpose: practice creating and compiling complete C++ programs.

YOU MAY WORK IN PAIRS FOR THIS LAB. Make sure you understand all the concepts!

Please notice that the public course web page now includes main and .h file templates, as well as a reminder of how to compile C++ programs on cs-server.

1. Remember sayit from the Week 12 Lab Exercise? (You can find a version of it on the course Moodle site, under "Week 12 Lab Exercise files" under "Some Solutions".)

Copy **sayit.cpp** and **sayit.h** to your current working directory in cs-server. (IF you use yours from last week, PLEASE NOTE that you need to ADD a #include for <iostream> to **sayit.h** --- it needs it so that parameter type **string** is declared in sayit's header!!)

Now write a main function in a file **cheer.cpp** that asks the user for a team name, and then prints to the screen a cheer consisting of GO! three times each on its own line, then the team name on its own line, then WIN! three times each on its own line, calling **sayit** appropriately. You must have the separate files **cheer.cpp** and **sayit.cpp**.

(Note: in C++, you can choose to ignore a function's returned value if you like --- just call the function as if it were a statement, all by itself on a line, followed by a semicolon. This only makes sense for a function with a side-effect, though...!)

Below, write the command you could type at the cs-server prompt to JUST compile sayit.cpp:

Below, write the command line you could type at the cs-server prompt to JUST compile cheer.cpp:

Below, write a command line you could now type at the cs-server prompt to create an executable program **cheer** from the functions in **cheer.cpp** and **sayit.cpp**.

2. Write a main function in **many\_circles.cpp** that asks the user how many circle areas he/she wants, and then asks them for that many circle radii, each time then showing the area for each circle to the screen. Your solution must use **circ\_area**, which must be in a separate file **circ\_area.cpp**.

Below, write the command line you could type at the cs-server prompt to JUST compile **many\_circles.cpp**:

Below, write a command line you could now type at the cs-server prompt to create an executable program **many\_circles** from the functions in **many\_circles.cpp** and **circ\_area.cpp**.

NOW write your name(s) on the **NEXT:** list on the board. (You write your name on this list if you have questions along the way, as well as when you are done; I'll then work my way down the list.) You need to complete the above and have it checked by the end of lab.