COS126: General Computer Science	Spring 1996
Problem Set # 0	
Handed Out: Feb. 6, 1996	*Finish by: Feb. 9, 1996*

This assignment carries no grade and should *not be submitted*. Its sole purpose is to introduce you to the mechanics of programming: logging in to the computer, using the text editor emacs, and finally, compiling and running your programs. While you are in the lab, you should also learn how to use electronic mail and the web.

Try to go to the lab when a lab assistant is scheduled to be there (usually 7–11pm) so you can get help. And **don't be afraid to ask for help**.

We are also organizing 30-minute help sessions this week on Tues., Wed., or Thurs.. to get you started. **Everybody should sign up for one session.**

Hello World

Your goal is to type up and run the following very basic program.

```
#include <stdio.h>
void main()
{
    int i;
        printf("Hello, world!  Give me a number.\n");
        scanf("%d", &i);
        printf("You gave me the number %d",i);
}
```

To do this you will have to do the following (ask the lab TAs for help if you run into any difficulties).

- `Login` to one of the SPARCstations in CS101. After logging in, you enter commands to the computer. To enter a command, type its name and hit the [ENTER] or [RETURN] key.
- Type `x11copy`, then `x11` to fire up the windows system.
- Type `emacs &` in the window. The text editor emacs starts up. If you have used any editors before, you will know how to use emacs. (Just use the pull-down menus and the mouse.) You can also run a tutorial (look at the *help* menu).

  Use emacs to create a file called `hello.c`. In this file, type in the above program. (Remember: do not change even a comma, or else the program won't run correctly.) Save the file.

- Now type `lcc hello.c` in the other window. This will *compile* the program, and put an *executable file* called `a.out` in your directory. (If `lcc` complains, you mistyped something, and you should get help.)
- Type `a.out` in the window. This will *execute* your program. The computer will print the following sentence on the screen: `Hello world!  Give me a number.` Then it will *do nothing.* You must type a number (say, 5), and hit [ENTER] (or [RETURN]). Then the computer will print the following sentence: `You gave me the number 5`.
- To print out your program at the printer, type `lpr hello.c`.

After you've successfully completed all the above steps, try out some other pieces of software you will be using over the semester. At the very least, figure out how to use electronic mail and the web.

Send us electronic mail telling us whether or not you've ever programmed before, what department at Princeton you think you might major in, and anything else you'd like to tell us. To do this, you type `mail cs126`, write your message, then type `ctrl-d` (i.e., press the [Ctrl] and the "d" keys simultaneously) on a line by itself to end the message.

Type `netscape &` to start the web browser *Netscape.* Visit the course homepage at `http://www.cs.princeton.edu/courses/cs126`.

Experiment with creating and resizing windows, and using the mouse. Send mail to a friend. Try some basic Unix commands (`ls`, `cd`, `mkdir`, to name a few). In general, make sure that you get reasonably comfortable with using the computer.

IMPORTANT REMINDER: Don't forget to `Logout` from the SPARCstation before you leave the lab!.