Programming Assignment 2 (5 pts, Due at 5pm March 5, Thursday)

Run the client and server programs you developed in the first programming assignment. Terminate your client program using "**CTRL+C**" and then use the unix command "**ps –u YOUR-USER-NAME**" to monitor the processes. You may find a process marked as "**<defunct>**", which is also known as a zombie process. In this assignment, you need to revise your server program (**only the server program needs to be revised**) to handle zombie processes. Use the unix signal and develop a signal handler, in which you may use system function "waitpid" to handle zombie processes.

Note that:

1) Test both your server and client programs in a single machine, and use IP address "127.0.0.1" (local host) as the server's IP address and port number "12345" for this service.
2) For the grading purpose, you MUST write your programs using C/C++ and put the source code for the client and server programs in files called "client2.c" and "server2.c" respectively. And, you MUST make sure that your programs work on the programming environment that TA described in the recitation.
3) You MUST submit the source code files as a single zip file (with the name of "YourLastName-FirstName-PA2.zip") to the blackboard before the deadline. Moreover, you need to bring a hard copy of your source code to the class on the due date. You may be asked to demo your programs by the TA.
4) You MUST write your own programs. Copying codes from others or some online sources may result in serious consequences!!!