Client-server Programming – Lab Assignment

This lab assignment is worth 50% of your overall CA component for this module.

You will be given the code file for either a client or server part of an application. You are required to write code for the other part of the application. When complete test your code against the application provide to ensure it responds in the appropriate manner.

You are required to submit your material using *Webcourses*. Please refer to the instructions outlined in Appendix A of this document for using the *WinSCP* utility. This utility can be used to copy files from the Linux server (APOLLO) to your U: drive. It is installed on all lab machines.
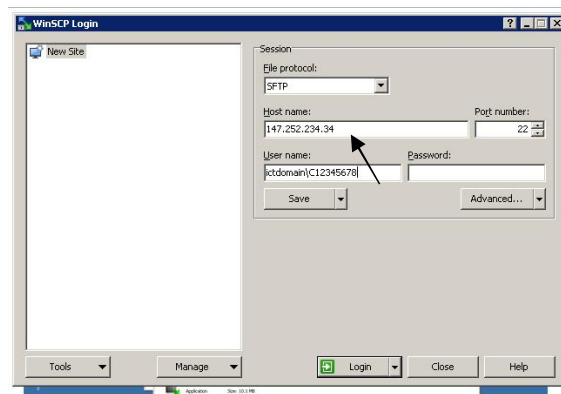
The following are INSTRUCTIONS for completing and submitting your lab assignment. You must follow these instructions:

- On the paper attendance sheet print your name, student number and sign.

- There are two electronic files to submit: a source code file (.c) and a test.txt file containing the results of testing. The name to be used for the source file will be given to you on the day.

- In both files **INCLUDE YOUR NAME AND STUDENT NUMBER IN THE FIRST LINE OF EACH FILE**. (Naturally this will be a comment in the source (.c) file).

- Name your files in accordance with the instructions given on the exam paper. You must submit the source code file i.e. the ".c" file (NOT the executable) **and** the "test.txt" file.

- All submissions to be made by the end of the lab session on the day of the examination (for Tuesday's lab the deadline is 13:55, for Wednesday's lab the deadline is 12:55, for Thursday and Fridays' lab the deadline is 10:55). Late submissions will **not** be accepted. If the files are not submitted by the deadline or you do not include your name and student number you will be deemed not to have submitted your work and will be awarded zero marks.

- There shall be no communication (verbal, electronic or otherwise) between students during the exam.

- You may refer to previous lab and class material and the internet.

- Normal lab rules apply in addition to the above instructions.
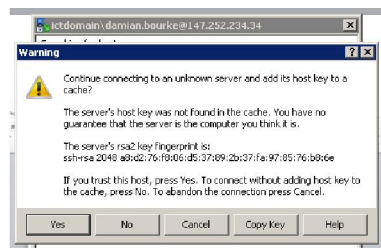
Appendix A – Using *WinSCP* to copy your code files off APOLLO onto your U: drive.

To facilitate moving files between the Apollo server and your local student drive folders, use the *WinSCP* utility which is already installed on the lab computers. The application icon can be found on the Desktop or it can be located using the inbuilt search facility. Run the application (double-click the program icon).
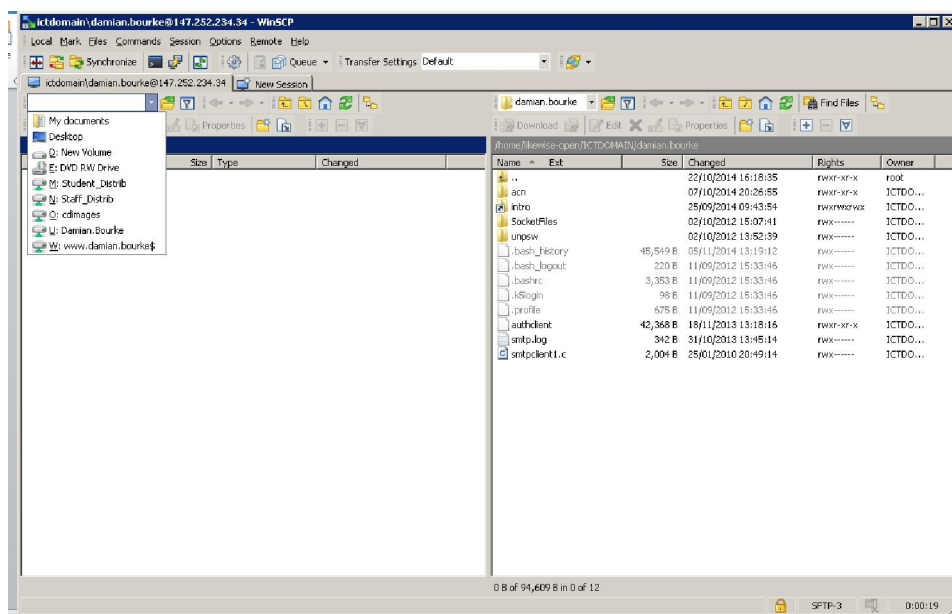
The following screen will be presented. Note the IP address (Apollo) and Port number used:

Occasionally the following dialogue is presented:

Click Yes to proceed to the following screen:

This is the standard *WinSCP* screen. There are two parts to consider. On the right side is the Apollo server folder view. On the left side, select the local folder system you want to access using the drop-down box (shown); in this case you will want to select your U: drive.

Move around the folders on each side of the screen until you get to where you want to move files "From" (APOLLO) and "To" (your U: drive). To transfer a file from Apollo highlight it in the folder view on the right side of the window and press F5 (this is a shortcut to copy files). You will be asked to verify that you want to transfer the selected file to the destination folder on the left side of the screen.

That's all there is to it. Once the file(s) are on your U: drive you can easily locate it to upload files to *Webcourses*.