Helpful Unix Terminal Commands

Conventions Used

Boldface	is what you type at the command line.
command	is the name of the command.

(If you know a command and doesn't know how to use it, type man name_of_command. The man page will tell you all you need to know about using the command)

Make/List/Remove/Rename Directory

- Make directory (mkdir directory_name)
- Change Directory/Folder (cd directory_name)
- List contains of directory (ls)
- Remove directory (rmdir directory_name)
- Rename directory (mv directory_name_old directory_name_new)

Example:

Make a directory called mydoc	**mkdir mydoc**
Enter directory mydoc	**cd mydoc**
To list contents of directory (if you are in mydoc)	**ls**
To list contents of directory	**ls mydoc**
To return to home[1]	**cd ..**
To return to home from any directory	**cd**
To remove mydoc	**rmdir mydoc**
To rename a directory	**mv mydoc mydoc-new**

Print Working Directory

- Display current working directory (pwd)

Example:

Show current working directory	**pwd**

Create/Copy/List/Rename/Remove File

- Create a file (emacs filename) -- more on this in another document!
  (many ways of doing this, pick your favorite editor!, we will use emacs here)
- Copy a file (cp filename_source filename_destination)
- List a file (ls filename)
- Rename a file (mv filename_old filename_new)
- Remove a file (rm filename)

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1. Assuming you are in directory mydoc. You can also use this command to go up one directory level.

Example:

Create a file	**emacs test.cpp** (save: ctrl-x-s, exit: ctrl-x-c)
Copy a file	**cp test.cpp new.cpp**
List a file	**ls test.cpp**
Rename a file	**mv new.cpp new2.cpp**
Remove/Delete a file	**rm test.cpp**

Compile/Execute

- Compile a file (CC -o filename filename.cpp)
- Execute (filename)

Example:

Compile a file	**CC hello_world.cpp -o hello_world**
Execute	**hello_world** (observe the output)

Shortcuts

Well, the followings are not shortcuts to get your programming assignments completed. However, some of these can help to make 'life' much easier!

- List the commands that you have used (history)
- Re-execute the last command (!!)

Example:

List the command history	**history**
Pick a command to re-execute	**!#** (# obtain from history list)
Re-execute the last command	**!!**
Repeat Compilation	**!CC**

THINGS NOT TO DO:

rm *.* -- This is an industrial strength command. It has the capability to remove all the files in the directory the command is executed. So, don't use it. Otherwise, you will remember it for at least the rest of the semester - usually for the rest of your life.

Things that you should/must do otherwise ... :

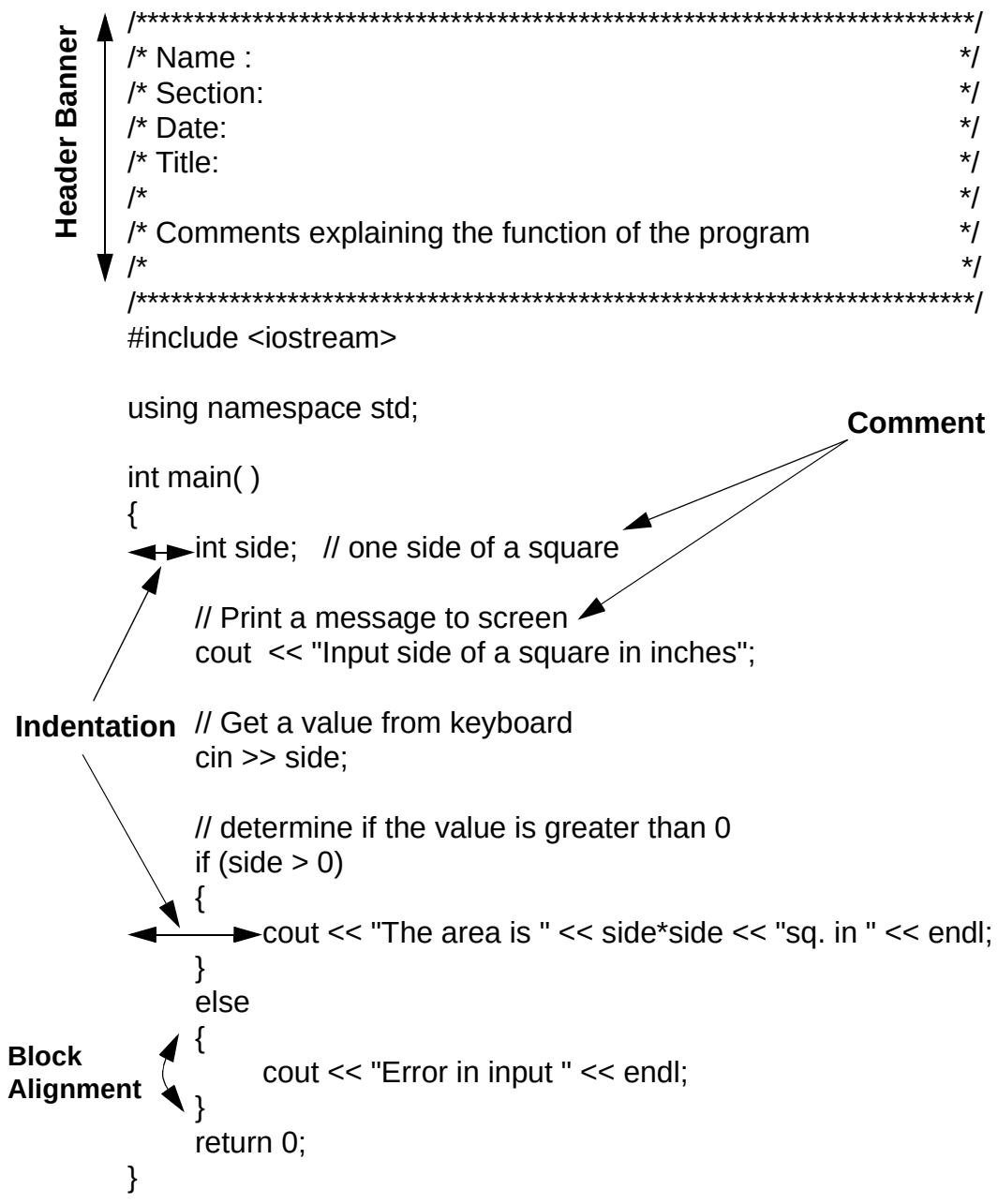
a. Crete a new directory for each lab assignment.

b. Comment your code.

c. Indent

d. Header banner

d. An Example


Header Banner
/**/
/* Name :   */
/* Section: */
/* Date: */
/* Title: */
/*   */
/* Comments explaining the function of the program   */
/*   */
/**/
#include <iostream>
using namespace std;
Comment
int main( )
{
int side;   // one side of a square
// Print a message to screen
cout << "Input side of a square in inches";
Indentation
// Get a value from keyboard
cin >> side;
// determine if the value is greater than 0
if (side > 0)
{
cout << "The area is " << side*side << "sq. in " << endl;
}
else
{
cout << "Error in input " << endl;
}
Block Alignment
return 0;
}

f. Remote access
To telnet to Ray to do your work, there are 2 options.

1. If you live on campus, you can telnet by typing in a DOS window:
telnet ray.eng.uah.edu or **telnet ebs330.eng.uah.edu**
Note: telnet is not secured. The second option will allow you to access the server from anywhere through a secure shell.

2. If you live off campus, you need PUTYY.
Download PuTTY(~300 KB). You can find PuTTY on the net by entering the word PuTTY in any search engine. This program is freeware. After downloading PuTTY, click on the PuTTY icon. You get the PuTTY configuration. In the **Host Name type: ray.eng.uah.edu** , click on the "**ssh**" button, and finally click the open button.

- If you have a secured shell program besides PuTTY, you can use it instead. telnet will not work off campus.
- To edit a file type **pico** in PuTTY's terminal window.