

Unix Exercise

1. Open a terminal window and find out the absolute path of your working directory.
2. List the files and folders in your home directory. How many of them are directories, how many of them are regular (data) files? What permissions are given to users, groups and other users?
3. Create a directory called `cis15` in your home directory. Create a file called `hello.cpp` using `touch` command (creates an empty file. Usage `touch <filename>`) and write a C++ program that will output "Hello, World!" when executed, using emacs text editor.
4. Create a directory called `<yourname>_unit1` under `cis15` directory while your working directory is your home directory. Move the `hello.cpp` file under `cis15` directory.
5. Place a copy of `hello.cpp` into `<yourname>_unit1` directory. Try to delete `<yourname>_unit1` directory using `rm` command. Why does it fail? What switches that you need to use with `rm` to delete the directory? Find out from manual pages.
6. Once you successfully delete the `<yourname>_unit1` directory, create it again and inside it create a text file `wc1.txt` that contains the word count of `hello.cpp` program located under `cis15` directory.
7. Open `cis15` with `emacs` command, what does it contain? Create another file using `touch` command
8. Compile the `~/cis15/hello.cpp` program using `g++` naming the executable file `hello`.
9. Go to your home directory and type the following command:

```
tar -czvf cis15.tgz cis15/
```

This command will run archive tool `tar` (similar to `winzip` in windows) which will compress all the files and folders within `cis15` directory and place them in a file named `cis15.tgz`.

10. Rename `cis15.tgz` file to `<yourname>_cis15.tgz`.
11. Send me an email attaching the renamed `<yourname>_cis15.tgz` to the message with subject: CIS15 - Unix exercise - *yourname*