Useful Bash Terminal Commands

In computer science, we do a lot of work on the terminal. As you gain familiarity with the command prompt, you'll often find that it's easy to type exactly what you mean instead of relying on a graphical tool. However, if you're not sure what to do, the graphical tools in your file manager or IDE can help you organize your files.

Here are some more terminal commands you might want to be familiar with. (These commands are for the Bash terminal that is common on Linux.)

Administrator commands

sudo

The "sudo" prefix command means this command will temporarily be executed with system administrator permissions. (The "su" part comes from "superuser", which means system administrator. Other terms for this are "root user" or simply "administrator".) Such commands are potentially dangerous because they can take control of your system. In this course, please only enter terminal commands that we have told you about. If a random stranger on the internet tells you to type a command in the terminal, you should be suspicious, *especially* if the command uses "su," "sudo," etc. If you are trying to follow some tutorial instructions published on a reputable website, then you should gauge whether the information is trustworthy before entering commands in your terminal. Sites like StackOverflow use community curation to guard against misleading or dangerous information, but you should still exercise caution.

Common commands

man

The **man** command ("manual") shows help information for other commands. For example, **man man** will display the help information for **man** itself. To quit the help viewer screen, press the **q** key.

pwd

The pwd command, "print working directory," will display the full name of the path you are in currently. This is mainly useful if you are using a terminal that doesn't already show that information at the command prompt.

ls

The ls command lists directory contents. You can use it to list the current directory's contents, or you can specify another directory as an argument. You can also see a long-format listing including modification dates and hidden files, typing:

ls -hal

cd

The cd ("change directory") command will let you move around the filesystem. You can specify a directory or type **cd ..** (with two dots) to go up one directory. As a shortcut, **cd ~** will take you directly to your user's home directory. On AWS Cloud9, you would normally want to use **cd ~/environment** instead, to arrive at the same directory that is shown in the graphical file list.

Usually, your terminal will support **tab completion**, which means that if you are typing a path you can press Tab partway through typing and automatically have your command finished. This is lets you avoid having to laboriously type out long filenames. Just type the first few letters and press Tab. Here's an illustration:

```
ec2-user:~/environment $ ls
README.md  status_logs_february_2019
ec2-user:~/environment $ cd stat

(After just typing the four letters "stat", we would want to press Tab here!)

ec2-user:~/environment $ cd status_logs_february_2019
ec2-user:~/environment/status_logs_february_2019 $

(That let us finish typing the command immediately.)
```

File management commands

These commands can create or delete files, so be careful before you try to use any of them! We just want you to be aware of what they do. You can read the instructions for each one with the **man** command, for example: **man mv** will tell you all the details about the **mv** command.

cp

The cp command will copy a file.

mkdir

The mkdir command will make a new subdirectory.

mv

The mv command will move or rename a file.

rm

The rm command will "remove" or delete a file. Be very careful!