Using the Linux Command Line

Using the Linux Command Line

- The Sandbox is a cloud-based machine running *Ubuntu*, one of the many flavors of the *Linux* OS.
- Many modern Linux distributions have graphical user interfaces (GUI) to allow easy mouse-based navigation.
- Still, as a programmer you'll likely be using your *terminal window* frequently, and you can do many of the same tasks with keyboard commands.

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- Let’s have a look at some of the most important of these keyboard-based commands for working within the IDE or any UNIX-based system.

Using the Linux Command Line

`ls`

- Short for “list”, this command will give you a readout of all the files and folders in your current directory.

Using the Linux Command Line

`cd <directory>`

- Short for “change directory”, this command change your current directory to `<directory>`, which you specify, in your workspace or on your operating system.
- The shorthand name for the current directory is `.`
- The shorthand name for the parent directory of the current directory is `..`
- If ever curious about the name of the current directory, though the terminal prompt will often tell you, you can type pwd (present working directory).

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`mkdir <directory>`

- Short for “make directory”, this command will create a new subdirectory called `<directory>` located in the current directory.

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`cp <source> <destination>`

- Short for “copy”, this command will allow you to create a duplicate of the file you specify as `<source>`, which it will save in `<destination>`.

- If you wish to copy entire directories, you’ll need to modify the command slightly:

  ```
  cp -r <source directory> <destination directory>
  ```

  The “`-r`” stands for *recursive*, and tells `cp` to dive down into the directory and copy everything inside of it (including any subdirectories it might contain).

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`rm <file>`

- Short for “remove”, this command will delete `<file>` after it asks you to confirm (y/n) you want to delete it.

- You can skip the confirmation by typing:

  `rm -f <file>`

  But use at your own peril! There’s no undo.

- To delete entire directories you need to use the `-r` flag, just as was the case with `cp`.

  `rm -r <directory>`

- You can also combine the `-r` and `-f` flags into `-rf`. Again, careful! There’s no undo!

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`mv <source> <destination>`

- Short for “move”, this command will allow you to effectively rename a file, moving it from `<source>` to `<destination>`.

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- To be sure, there are many more basic command line utilities at your disposal, and we'll discuss many of them in the future in CS50.

- If you wish to explore other interesting ones before we see them in the class, read up on:

`chmod`	`ln`	`touch`
`rmdir`	`man`	`diff`
`sudo`	`clear`	`telnet`