

# CSE Club Linux Workshop

This workshop is to introduce you to an easy way of navigating through a terminal that runs Bash shell on a linux operating system.

## Commands Reference List:

- **ls** = Directory listing
- **cd** = Change directory to home
- **cd "dir"** = Change directory to "dir"
- **cd ..** = Change directory to previous directory
- **pwd** = Show current directory
- **mkdir** = Create a directory
- **touch "file"** = Create file
- **rm -r "dir"** = Delete directory
- **rm "file"** = Delete file
- **cp "file1" "file2"** = Copy "file1" to "file2"
- **cp -r "dir1" "dir2"** = Copy "dir1" to "dir2", creates "dir2" if does not already exist.
- **mv "file1" "file2"** = Move or rename "file1" to "file2", could also move file into directory if it exist.
- **echo "text" >> "file"** = creates output " text" to screen and redirects it to "file"
- **cat "file"** = view the content inside the file.

## Step 1: Create a folder

You can create a folder by typing the **mkdir** command followed by the name you want to give it.

-Example : [NewTrainer]\$ **mkdir Pokemon**

You should then be able to see it as folder if you check with **ls**.

-Example : [NewTrainer]\$ **ls**

```
Desktop  Downloads  Pictures  Public
Documents  Music    Pokemon  Template
```

## Step 2: Changing Directory

Change directory into your new folder by typing the command **cd** and then the name of your folder.

- Example: [NewTrainer]\$ cd Pokemon

You should now be inside your folder. Note that if you use the **ls** command you will see that there is nothing there. That is because you had just made the folder, there should be nothing there!

## Step 3: More folders!

Now create 3 more folders inside using the **mkdir** command you learned in the first step. Check to see if each folder was created by using **ls** command.

```
-Example: [NewTrainer]$ cd Pokemon
[NewTrainer]$ ls
[NewTrainer]$ mkdir Charmander
[NewTrainer]$ mkdir Bulbasaur
[NewTrainer]$ mkdir Squirtle
[NewTrainer]$ ls
Bulbasaur      Charmander      Squirtle
```

## Step 4 : Files

Now choose a folder and change directory into it. Once inside make a folder by using the the command line **touch** and then whatever name you want to give it. Repeat this command to make another file.

```
-Example: [NewTrainer]$ cd Bulbasaur
[NewTrainer]$ touch VineWhip
[NewTrainer]$ touch RazorLeaf
[NewTrainer]$ ls
RazorLeaf  VineWhip
```

## Step 5: Write in files

There are a couple ways to write into a file. One way is by using the **echo** command followed by the text you want to input then the **>>** command and finally the file you want to direct it to.

- Example: `[NewTrainer]$ echo Grass >> VineWhip`

To view the content in your file you would use the command **cat** followed by the the name of the file you want to view.

- Example: `[NewTrainer]$ cat VineWhip`  
Grass

## Step 6: Renaming

Let's say you want rename a directory to another name the **mv** command can be used to do this. In order for it to work tho you need to have the that you want to change be listed when you **ls**.

- Example: `[NewTrainer]$ ls`  
Bulbasaur Charmander squirtle

(now I can change the name Charmander to Blaze)

- Example: `[NewTrainer]$ mv Charmander Blaze`  
`[NewTrainer]$ ls`  
Blaze Bulbasaur Squirtle

We use the command **mv** because we technically do move the directory to another directory but if the directory we are moving into does not exist then it will create it. This why we can “rename” a directory.

## Step 7: Moving

Now the goal of this step is going to be to move the three directories into one directory that is also under the first directory you made. The first thing you should do is create the directory and then use the `mv` command to move each directory.

```
-Example: [NewTrainer]$ ls
          Blaze    Bulbasaur    Squirtle
[NewTrainer]$ mkdir Party
[NewTrainer]$ ls
          Blaze    Bulbasaur    Squirtle    Party
[NewTrainer]$ mv Blaze Party
[NewTrainer]$ls
          Bulbasaur    Squirtle    Party
```

Notice how Blaze is no longer listed. That is because it should be in my Party directory. Remember you can move and out of a directory by using the `cd` and `cd ..` commands.

Once you get the hang of things try using the other commands listed above in the Command Reference List. The point of this workshop is not only to get familiar with navigating through linux but to also experiment with the commands, get creative, get errors, figure out what went wrong and have fun with it.