* 1. Commands and Paths

1. The cd command changes the directory that the shell is working in while the pwd command prints the directory you are currently in.
2. One command would be cd. Another command would be cd ~. You could also use the cd command to go to a specific user ID’s home directory by typing “cd ~USERNAME” while in the root directory.
3. i) The path in question is absolute because it goes from root directory to the destination directory through each step.

ii) cd Documents/../data/bases

1. The command will land you in the home directory.
   1. Copy, rename, and delete
2. arcwr@LAPTOP-5Q8OPTNL MINGW64 ~

$ ls -R PHY494/01\_shell

PHY494/01\_shell:

data/ Documents/

PHY494/01\_shell/data:

PHY494/01\_shell/Documents:

work/

PHY494/01\_shell/Documents/work:

'~$son\_Sydney\_hw1.docx' 'assignment\_01 (1).pdf' Olson\_Sydney\_hw1.docx TODO

* 1. Danger Zone

1. The command rm -rf / will indiscriminately delete the root directory and everything in it. The rm means remove, the -rf basically says you know what will happen with this command, and will avoid fail safes if there are any, and the / is your root directory, the victim. Maybe the command could be used to erase a completely infected hard drive before installing a new OS.
   1. Pipes and Filters
2. wc -l planets\_2.dat; Planets\_2.dat contains 120 lines because the file is a concatenation of two copies of planets.dat
3. sort -k 2,2 -n -r planets.dat | head -3 > biggest\_planets; The three biggest planets are Bespin, Kamino, and Malastare.
4. grep “ice” planets.dat > bases; 2 planets have terrains with ice, Hoth and Mygeeto.
5. cut -b 1,1 planets.dat | sort | uniq -c | sort; S and C appear 7 times while F, J, V, Q, Y all appear one time as the first letters of planet names.