Homework 1 - Bash

##Question 1: (10 Points)
What is the difference between shell and bash?

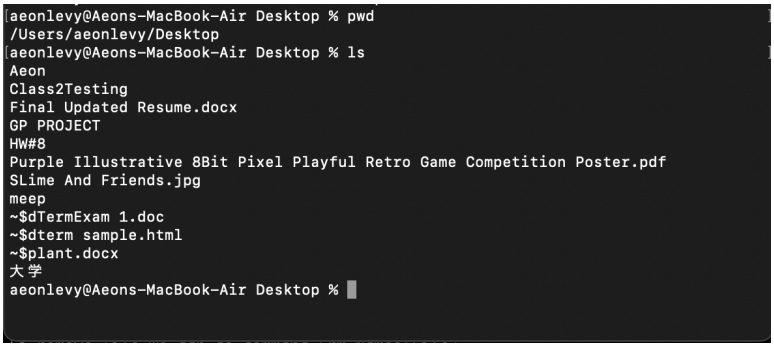
- Bash is a distinct type of shell, like a different version. It is used for other applications. Bash is used on Mac or OS, and Shell can be used on other computers.

##Question 2: (10 Points) To respond to this question, you need to use terminal/Bash and have a screenshot of your terminal/bash.
What is your home directory?

- My home directory is my Desktop.

What files/folders exist in it?

- All the files on my Desktop are homework or school-related. Also, I have my resume on there. I have a lot of folders called GP PROJECT, 大学, Aeon, Class2Testing, HW#8, and meep. My files are just some random assignments.

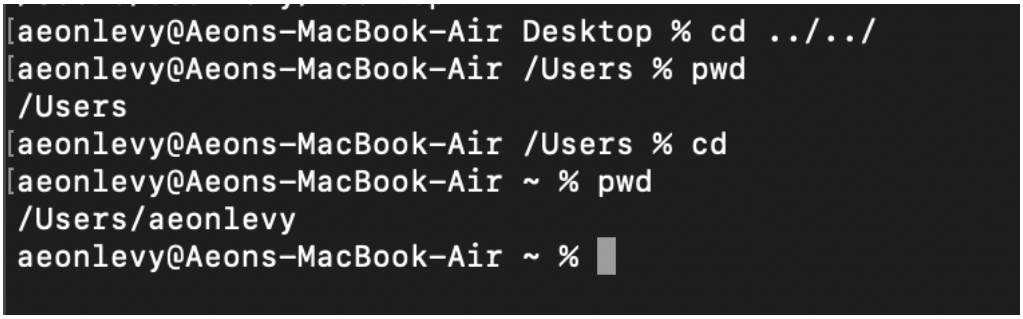


##Question 3: (10 Points) To respond to this question, you need to use terminal/Bash and have a screenshot of your terminal/bash.
Where does the command `cd../../` take you? Run the command `pwd` and explain the output!

- The command cd../../makes my terminal move up two levels, so when I run the command pwd it now shows that my directory is just /Users

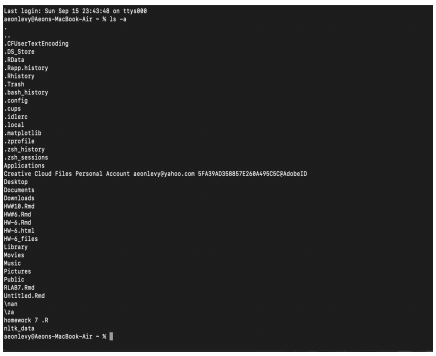
What does the command `cd` do? Run the command `pwd` and explain the output!

- When I do cd, its preparing to set my directory, so when I run the command pwd it says /Users/aeonlevy. So I'm assuming its getting ready to set my directory within my account

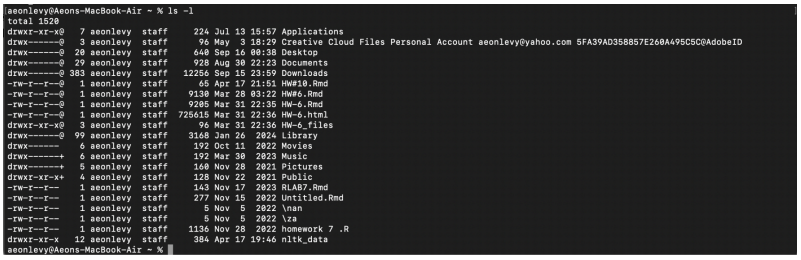


##Question 4: (10 Points) To respond to this question, you need to use terminal/Bash and have a screenshot of your terminal/bash.
Read the manual page of ls. What does the `a` flag do? What does the `l` flag do?

- After reading the manual, I learned that the flag 'a' Includes directory entries whose names begin with a dot ('.').Basically, it tells you all the files, including ones that might start with '.'



- The l flag says, (The lowercase letter "ell".) List files in the long format, as described in the Long Format subsection below. What this means is that the command shows other details about the files.a



##Question 5: (A and B each have 5 points, and C has 10 points. The total is 20 points.) To respond to this question, you need to use terminal/Bash and have a screenshot of your terminal/bash.
Create a folder within your home directory, which was identified in Question 2, and name it 'temp_bash'.
Create a new file using the command `touch` and name it `myfile.txt` inside the new folder `temp_bash` and run `ls` to show that the file is inside the folder.
Run the `stat myfile.txt` command and explain the information retrieved from the output. Here is an example of what should be included in the output and a brief explanation for each part.
`Blocks: 0 ` The number of blocks for the file.
`IO Block: 65536` The size of each block.

```
aeonlevy@Aeons-MacBook-Air Desktop % mkdir temp_bash
aeonlevy@Aeons-MacBook-Air Desktop % pwd
/Users/aeonlevy/Desktop
aeonlevy@Aeons-MacBook-Air Desktop % cd temp_bash
aeonlevy@Aeons-MacBook-Air temp_bash % pwd
/Users/aeonlevy/Desktop/temp_bash
aeonlevy@Aeons-MacBook-Air temp_bash % touch myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % ls
myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % stat myfile.txt
16777227 114361549 -rw-r--r-- 1 aeonlevy staff 0 0 "Sep 16 12:34:58 2024" "Sep 16 12:34:58 2024" "Sep 16
 12:34:59 2024" "Sep 16 12:34:58 2024" 4096 0 0x40 myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash %
```

###Question 6: (40 Points) To respond to this question, you need to use terminal/Bash and have a screenshot of your terminal/bash.

Use the command `>>` and add the following line This line is my first line. Now add the following line This line is my second line. Then, run cat myfile.txt to show that the line has been added.

Copy the file myfile.txt to file copy_myfile.txt with the command `cp`

Use the command `>` and add the following line This line is a new line to copy_myfile.txt. Then run cat copy_myfile.txt to show the line is added.

Explain the difference between `>` and `>>` based on the result of the Question 6.

- The difference between > and >> is that >> was used to add new lines to the file we created. But when we created the new/copy file we used the command > to overwrite the contents of the original file to write a new line. So >> adds new lines while > will rewrite the text

```
aeonlevy@Aeons-MacBook-Air temp_bash % echo "This line is my first line." >> myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % echo "This line is my second line." >> myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % cat myfile.txt
This line is my first line.
This line is my second line.
aeonlevy@Aeons-MacBook-Air temp_bash % cp myfile.txt copy_myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % echo "This line is a new line." > copy_myfile.txt
aeonlevy@Aeons-MacBook-Air temp_bash % cat copy_myfile.txt
This line is a new line.
aeonlevy@Aeons-MacBook-Air temp_bash %
```