Exercise-Bash

Question:

What is difference between shell and bash?

- “shell” is a broad term that refers to any program that provides a command-line interface, “Bash” is a specific type of shell that is widely used in Unix/Linux systems.

Exercise 1:

What is your home directory? What files/folders exist in your home directory? Navigate to it and then navigate back to your notes.

Home directory is the default directory for a user on a computer that a shell takes you to when you open it.

Exercise 2:

Where does the following command take you? How does it work?

This command takes you to the root directory of my computer, which does this by starting from the home directory with the tilde, then using 2 periods separated by slashes to indicate going back and does this 3 times

```
cd ~/../../..
```

Exercise 3:

Read the manual page of `ls`. What does the `a` flag do? What does the `l` flag do?

The ‘a’ flag includes directories whose names begin with a dot, and the ‘l’ flag follows the symbolic links to their final target and lists their file or directory that it links to.

Exercise 4:

Create a new file with `touch` command. for instance `touch myfile.txt`. Run `stat myfile.txt` what information do you get?

```
16777234 73659121 -rw-r--r-- 1 jasamius staff 0 0 "Jul  6 21:09
:32 2024" "Jul  6 21:09:32 2024" "Jul  6 21:09:32 2024" "Jul  6
 21:09:32 2024" 4096 0 0x40 myfile.txt
```

The data is size, access permissions, user/group ID, birth time and access of the file.

Exercise 5:

Run `ls` and from there list select a file. Now run 'ls -l' to display the details of the files, showing that it has been created or updated. what information does it give you regarding the `myfile.txt` and your selected file.

It displays the date and time of its last edit, and the filesize. My chosen file had an edit date of June 2nd, myfile.txt is at current date recent time. Myfile.txt also has a filesize of 0.

Exercise 6:

Add the following line `This line is my first line` to `myfile.txt`. Then run `cat myfile.txt` to show the line is added.

```
Macbook:data-413 jasamius$ echo "This is my first line" > myfil
e.txt
Macbook:data-413 jasamius$ cat myfile.txt
This is my first line
Macbook:data-413 jasamius$
```

Exercise 7:

Run `touch myfile.txt` then run `ls -l myfile.txt` does the "timestamp" for the file `myfile.txt` is updated? Show the output. *Note: Another common use of the touch command is to update the timestamps of an existing file.*

```
Macbook:data-413 jasamius$ touch myfile.txt
Macbook:data-413 jasamius$ ls -l myfile.txt
-rw-r--r--  1 jasamius  staff  22 Jul  6 21:22 myfile.txt
Macbook:data-413 jasamius$
```

It updates the timestamp