HW1 – Exercise-Bash

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.

(1) My home directory: `/Users/michellelee`

(2) List files/folders in my home directory:

```
Applications            Movies
Desktop                 Music
Documents         Pictures
Downloads         Public
Exercise-Bash.html.save         iCloud雲碟（封存檔）
Library               myfile.txt
```

(3) To navigate to it and back to notes:

```
[michellelee@MichelledeAir ~ % echo $HOME
/Users/michellelee
[michellelee@MichelledeAir ~ % ls ~
Applications                Movies
Desktop                     Music
Documents                   Pictures
Downloads                   Public
Exercise-Bash.html.save     iCloud雲碟（封存檔）
Library                     myfile.txt
[michellelee@MichelledeAir ~ % cd ~
[michellelee@MichelledeAir ~ % pwd
/Users/michellelee
[michellelee@MichelledeAir ~ % cd -
~
[michellelee@MichelledeAir ~ % pwd
/Users/michellelee
michellelee@MichelledeAir ~ %
```

Exercise 2: Where does the following command take you? How does it work?

The command `cd ~/../../..` does the following:
`~` takes you to your home directory
`/../..` then goes up three directory levels from there
This could take you to the root directory (`/`) or close to it, depending on how deep your home directory is in the file system.

Exercise 3:

(1) To read the manual for `ls`.

(2) The `-a` flag shows all files, including hidden files (those starting with a dot). The `-l` flag uses a long listing format, showing detailed information about each file. (owner, size, permissions, and modification time.)

The following is a screenshot of some results after typing `man ls`.

Exercise 4: Create a new file with touch command. for instance `touch myfile.txt`. Run `stat myfile.txt` what information do you get?

Create a file: `touch myfile.txt.` , and then run `stat myfile.txt`

Here is the information I got:

```
16777233 25237963 -rw-r--r-- 1 michellelee staff 0 27 "Jul  4 20:27:52
2024" "Jul  4 20:27:50 2024" "Jul  4 20:27:50 2024" "Jul  4 16:47:41
2024" 4096 8 0 myfile.txt
```

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 inormation does it give you regarding the `myfile.txt` and your selected file.

```
-rw-r--r--    1 michellelee  staff    27 Jul  4 20:27 myfile.txt
```

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.

```
michellelee@MichelledeAir ~ % echo "This line is my first line" >
myfile.txt
michellelee@MichelledeAir ~ % cat myfile.txt
This line is my first line
```

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.*

This will update the timestamp of myfile.txt and show the new timestamp in the output.

```
michellelee@MichelledeAir ~ % touch myfile.txt
michellelee@MichelledeAir ~ % ls -l myfile.txt
```

```
-rw-r--r--  1 michellelee  staff  27 Jul  4 20:42 myfile.txt
```

* The following is all the coding and screenshots of this homework:

```
michellelee@MichelledeAir ~ % echo $HOME
/Users/michellelee
michellelee@MichelledeAir ~ % ls ~
Applications            Movies
Desktop                 Music
Documents          Pictures
Downloads          Public
Exercise-Bash.html.save      iCloud 雲碟（封存檔）
Library                 myfile.txt
michellelee@MichelledeAir ~ % cd ~
michellelee@MichelledeAir ~ % pwd
/Users/michellelee
michellelee@MichelledeAir ~ % cd -
~
michellelee@MichelledeAir ~ % pwd
/Users/michellelee
michellelee@MichelledeAir ~ % man ls
Unknown locale, assuming C
michellelee@MichelledeAir ~ % touch myfile.txt
michellelee@MichelledeAir ~ % stat myfile.txt
16777233 25237963 -rw-r--r-- 1 michellelee staff 0 27 "Jul  4 20:27:52
2024" "Jul  4 20:27:50 2024" "Jul  4 20:27:50 2024" "Jul  4 16:47:41
2024" 4096 8 0 myfile.txt
michellelee@MichelledeAir ~ % ls
Applications            Movies
Desktop                 Music
Documents          Pictures
Downloads          Public
Exercise-Bash.html.save      iCloud 雲碟（封存檔）
Library                 myfile.txt
michellelee@MichelledeAir ~ % ls -l
total 16
drwx------@   3 michellelee  staff    96 Sep  2  2023 Applications
drwx------@  24 michellelee  staff   768 Jul  3 16:19 Desktop
drwx------@   4 michellelee  staff   128 Jul  4 12:30 Documents
drwx------@ 291 michellelee  staff  9312 Jul  4 14:48 Downloads
-rw-------     1 michellelee  staff  2959 Jul  4 12:30 Exercise-
Bash.html.save
drwx------@  92 michellelee  staff  2944 Jul  4 11:44 Library
drwx------    5 michellelee  staff   160 Sep  4  2023 Movies
drwx------+   6 michellelee  staff   192 Aug 20  2023 Music
```

```
drwx------+  14 michellelee  staff   448 Sep  8  2023 Pictures
drwxr-xr-x+   4 michellelee  staff   128 Jul 26  2023 Public
drwx------    4 michellelee  staff   128 Jul 26  2023 iCloud雲碟（封存檔）
-rw-r--r--    1 michellelee  staff    27 Jul  4 20:27 myfile.txt
michellelee@MichelledeAir ~ % echo "This line is my first line" >
myfile.txt
michellelee@MichelledeAir ~ % cat myfile.txt
This line is my first line
michellelee@MichelledeAir ~ % touch myfile.txt
michellelee@MichelledeAir ~ % ls -l myfile.txt
-rw-r--r--  1 michellelee  staff  27 Jul  4 20:42 myfile.txt
michellelee@MichelledeAir ~ %
```