

# Hw 1

1) A shell is a general term for a user interface that allows you to interact with the operating system by executing commands. Bash is a specific type of shell. bash is a type of shell, but not all shells are bash. Different systems and users might use different types of shells based on their needs.

2)

```
conorgillingham@Conors-Air ~ % echo $HOME
/Users/conorgillingham
conorgillingham@Conors-Air ~ % ls -la $HOME

total 157240
drwxr-x---+  58 conorgillingham  staff      1856 Sep 13 12:06 .
drwxr-xr-x   5 root              admin      160 Jan 12  2024 ..
-r-----   1 conorgillingham  staff         7 Jul 22  2022 .CFUserTextEncoding
-rw-r--r--@  1 conorgillingham  staff    18436 Sep 11 17:45 .DS_Store
-rw-r--r--   1 conorgillingham  staff 78066510 Apr 29 20:20 .RData
-rw-r--r--   1 conorgillingham  staff         0 Feb 12  2024 .Rapp.history
-rw-r--r--@  1 conorgillingham  staff    19213 Sep 10 10:41 .Rhistory
drwxr-xr-x   4 conorgillingham  staff      128 Apr 21 16:57 .Rproj.user
drwx-----+  5 conorgillingham  staff      160 Sep 11 16:29 .Trash
-rw-----   1 conorgillingham  staff      464 Sep 10 10:41 .bash_history
drwxr-xr-x@  3 conorgillingham  staff       96 Jan 19  2024 .config
drwx-----   3 conorgillingham  staff       96 Sep  1  2022 .cups
drwxr-xr-x@  4 conorgillingham  staff      128 Feb 22  2024 .fontconfig
-rw-r--r--   1 conorgillingham  staff       62 Sep  9 17:03 .gitconfig
drwxr-xr-x   3 conorgillingham  staff       96 Jan 18  2023 .idlerc
drwxr-xr-x   3 conorgillingham  staff       96 Aug 29  2022 .local
```

My home directory appears to be /Users/conorgillingham which has 157240 that span from general setup to docs, pdfs and .jpeg files. It's too many for me to count manually

3)

```
conorgillingham@Conors-Air ~ % cd ../../
conorgillingham@Conors-Air / % pwd
/
conorgillingham@Conors-Air / %
```

The command took me directly to the root directory as confirmed by the output

```
conorgillingham@Conors-Air / % cd
conorgillingham@Conors-Air ~ % pwd
/Users/conorgillingham
```

The cd command took me back to the home directory

4)

**-a**        Include directory entries whose names begin with a dot ('.').

**-l**        (The lowercase letter "ell".) List files in the long format, as described in the The Long Format subsection below.

5)

```
conorgillingham@Conors-Air ~ % mkdir ~/temp_bash
conorgillingham@Conors-Air ~ % cd ~/temp_bash
touch myfile.txt
conorgillingham@Conors-Air temp_bash % ls

myfile.txt
conorgillingham@Conors-Air temp_bash % stat myfile.txt

 0 bytes, 0 blocks, 4096 IO Block size
```

6)

```
conorgillingham@Conors-Air temp_bash % echo "This line is my first line." >> myfile.txt

conorgillingham@Conors-Air temp_bash % echo "This line is my second line." >> myfile.txt
t
conorgillingham@Conors-Air temp_bash % cat myfile.txt
This line is my first line.
This line is my second line.
conorgillingham@Conors-Air temp_bash % cp myfile.txt copy_myfile.txt
conorgillingham@Conors-Air temp_bash % echo "This line is a new line." > copy_myfile.txt
t
conorgillingham@Conors-Air temp_bash % cat copy_myfile.txt
This line is a new line.
conorgillingham@Conors-Air temp_bash %
```

>: Replaces the content of a file with the new input. >>: Adds new input to the end of a file without altering its existing content.