cse15l-lab-reports

1. `cd` Command

No arguments: When you use `cd` with no arguments, it changes the directory to the user's home directory.

```
[parthshinde@Parths-MacBook-Air-3 Developer % pwd
 /Users/parthshinde/Developer
[parthshinde@Parths-MacBook-Air-3 Developer % cd
[parthshinde@Parths-MacBook-Air-3 ~ % pwd
 /Users/parthshinde
 parthshinde@Parths-MacBook-Air-3 ~ % █
```

Absolute path before command: `/Users/parthshinde/Developer`

Explanation: This command moves the working directory to the user's home directory. There's no error in this case.

Directory arguments: There's a directory named `Developer` in `/Users/parthshinde/`

```
[parthshinde@Parths-MacBook-Air-3 ~ % pwd
 /Users/parthshinde
[parthshinde@Parths-MacBook-Air-3 ~ % cd Developer
[parthshinde@Parths-MacBook-Air-3 Developer % pwd
 /Users/parthshinde/Developer
```

Absolute path before command: `/Users/parthshinde/`

Explanation: This command changes the directory to `/Users/parthshinde/Developer`. If it exists, there's no error; otherwise, an error will indicate that the directory does not exist.

File as an argument: If you try to `cd` into a file, it will result in an error.

```
[parthshinde@Parths-MacBook-Air-3 ~ % pwd
 /Users/parthshinde
[parthshinde@Parths-MacBook-Air-3 ~ % cd Desktop/example.txt
 cd: not a directory: Desktop/example.txt
```

Absolute path before command: `/Users/parthshinde/`

Explanation: Since `cd` is used to change directories and not to open files, using it with a file path will result in an error.

2. `ls` Command

No arguments: Lists files and directories in the current working directory.

```
[parthshinde@Parths-MacBook-Air-3 ~ % ls
 Applications          Library              go
 Desktop               Movies               node_modules
 Developer             Music                package-lock.json
 Documents             Pictures             package.json
 Downloads             Postman
 Google Drive          Public
```

Absolute path before command: `/Users/parthshinde/`

Explanation: This command lists all files and directories in `/Users/parthshinde/`. It's not an error.

Directory arguments: Lists files and directories in the specified directory.

```
[parthshinde@Parths-MacBook-Air-3 ~ % ls Developer
 CSE15                 Personal             cse15l-lab-reports
 CSE_12_WI24           campus-mobile        flutter
 DSC_30_FA23           campus-mobile-bitbucket stuzz
```

Absolute path before command: `/Users/parthshinde/`

Explanation: This command lists the contents of `/Users/parthshinde/Developer`. If the directory exists, there's no error; otherwise, an error message will show.

File arguments: Lists the specified file if it exists.

```
[parthshinde@Parths-MacBook-Air-3 ~ % ls Desktop/example.txt
Desktop/example.txt
```

Absolute path before command: `/Users/parthshinde/`

Explanation: This command outputs the name of the file if it exists. If not, an error will indicate that the file does not exist.

3. `cat` Command

No arguments: Without arguments, `cat` waits for input from the user typing.

```
Last login: Tue Apr  9 17:24:52 on ttys002
[parthshinde@Parths-MacBook-Air-3 ~ % cat
```

Absolute path before command: `/Users/parthshinde/`

Explanation: `cat` without arguments expects input from the user. It's not an error but waiting for input.

Directory arguments: Trying to `cat` a directory will result in an error.

```
[parthshinde@Parths-MacBook-Air-3 ~ % cat Developer
cat: Developer: Is a directory
```

Absolute path before command: `/Users/parthshinde/`

Explanation: You can't use `cat` on a directory, so this will result in an error message.

File arguments: Displays the contents of the specified file.

```
[parthshinde@Parths-MacBook-Air-3 ~ % cat Desktop/example.txt        ]
Hello World!%
```

Absolute path before command: `/Users/parthshinde/`

Explanation: This command displays the content of `example.txt` if the file exists. If the file doesn't exist, it results in an error.