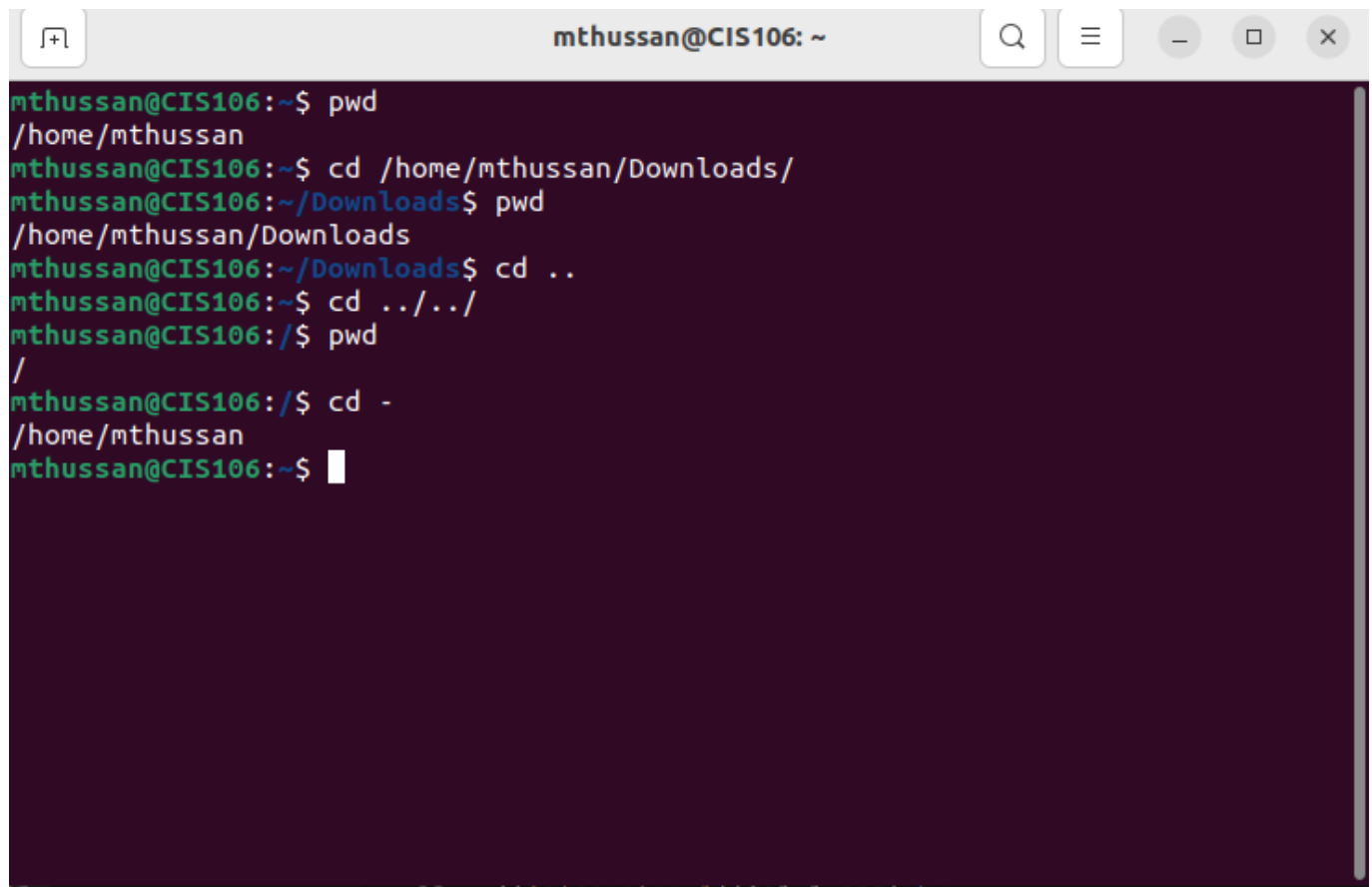


Week Report 4

Practice From The Presentation The Linux File System:

Practice 1



```
mthussan@CIS106: ~  
mthussan@CIS106:~$ pwd  
/home/mthussan  
mthussan@CIS106:~$ cd /home/mthussan/Downloads/  
mthussan@CIS106:~/Downloads$ pwd  
/home/mthussan/Downloads  
mthussan@CIS106:~/Downloads$ cd ..  
mthussan@CIS106:~$ cd ../../  
mthussan@CIS106:/$ pwd  
/  
mthussan@CIS106:/$ cd -  
/home/mthussan  
mthussan@CIS106:~$
```

Practice 2

```

mthussan@CIS106:~$ wget https://cis106.com/assets/practicels.tar.xz
--2023-03-18 22:32:17-- https://cis106.com/assets/practicels.tar.xz
Resolving cis106.com (cis106.com)... 185.199.108.153
Connecting to cis106.com (cis106.com)|185.199.108.153|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2229212 (2.1M) [application/x-xz]
Saving to: 'practicels.tar.xz'

practicels.t  0%      0  --.-KB/s    practicels.t  60%    1.29M  6.39MB/s    pra
cticels.t 100%    2.12M  6.79MB/s    in 0.3s

2023-03-18 22:32:17 (6.79 MB/s) - 'practicels.tar.xz' saved [2229212/2229212]

mthussan@CIS106:~$ tar Jxf practicels.tar.xz
mthussan@CIS106:~$ c practicels/
cd c: command not found
mthussan@CIS106:~$ cd practicels/
mthussan@CIS106:~/practicels$ ls
book.txt          people.csv
countries.xml     song.mp3
history-debian.pdf tux-nobg.png
homework.docx    tux-penguin.gif
movie.mp4
mthussan@CIS106:~/practicels$ ls -a
.
..
book.txt          song.mp3
countries.xml     tux-nobg.png

mthussan@CIS106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 mthussan mthussan 1043 Feb 27 2022 book.txt
-rw-rw-r-- 1 mthussan mthussan 23972 Feb 27 2022 countries.xml
-rw-rw-r-- 1 mthussan mthussan 163057 Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 mthussan mthussan 111303 Feb 22 2022 homework.docx
-rw-rw-r-- 1 mthussan mthussan 1570024 Feb 27 2022 movie.mp4
-rw-rw-r-- 1 mthussan mthussan 284042 Feb 27 2022 people.csv
-rw-rw-r-- 1 mthussan mthussan 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 mthussan mthussan 21314 Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 mthussan mthussan 44299 Jan 31 2020 tux-penguin.gif
mthussan@CIS106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 mthussan mthussan 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 mthussan mthussan 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 mthussan mthussan 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 mthussan mthussan 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 mthussan mthussan 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 mthussan mthussan 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 mthussan mthussan 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 mthussan mthussan 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 mthussan mthussan 44K Jan 31 2020 tux-penguin.gif
mthussan@CIS106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 mthussan mthussan 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 mthussan mthussan 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 mthussan mthussan 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 mthussan mthussan 1.5M Feb 27 2022 movie.mp4

```

```
-rw-rw-r-- 1 mthussan mthussan 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 mthussan mthussan 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 mthussan mthussan 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 mthussan mthussan 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 mthussan mthussan 44K Jan 31 2020 tux-penguin.gif
mthussan@CIS106:~/practicels$ ls -lhG
total 2.9M
4.0K -rw-rw-r-- 1 1.1K Feb 27 2022 book.txt
24K -rw-rw-r-- 1 24K Feb 27 2022 countries.xml
160K -rw-rw-r-- 1 160K Feb 27 2022 history-debian.pdf
112K -rw-rw-r-- 1 109K Feb 22 2022 homework.docx
1.5M -rw-rw-r-- 1 1.5M Feb 27 2022 movie.mp4
280K -rw-rw-r-- 1 278K Feb 27 2022 people.csv
748K -rw-rw-r-- 1 747K Feb 27 2022 song.mp3
24K -rw-rw-r-- 1 21K Feb 27 2022 tux-nobg.png
44K -rw-rw-r-- 1 44K Jan 31 2020 tux-penguin.gif
mthussan@CIS106:~/practicels$ ls -mr
tux-penguin.gif, tux-nobg.png, song.mp3,
people.csv, movie.mp4, homework.docx,
history-debian.pdf, countries.xml,
book.txt
mthussan@CIS106:~/practicels$ ls -1X
people.csv
homework.docx
tux-penguin.gif
song.mp3
movie.mp4
history-debian.pdf
history-debian.pdf
tux-nobg.png
book.txt
countries.xml
mthussan@CIS106:~/practicels$
```

Practice 3

```

mthussan@CIS106:~$ pwd
/home/mthussan
mthussan@CIS106:~$ cd
mthussan@CIS106:~$ cd /
mthussan@CIS106:/$ cd usr/share/themes
mthussan@CIS106:/usr/share/themes$ cd ../../
mthussan@CIS106:/usr$ ls -A ~
.bash_history  .local
.bash_logout   Music
.bashrc        Pictures
.cache         .pki
cis106         practicels
.cis106.png    practicels.tar.xz
.config        .profile
Desktop        Public
Documents      snap
.dotnet        .ssh
Downloads      .sudo_as_admin_successful
.fonts         Templates
.gitconfig     Videos
.gnupg         .viminfo
lab4files      .vscode
.lessht
mthussan@CIS106:/usr$ cd; ls -tX cis106/
cheatSheets  labs
finalProject weekReports
mthussan@CIS106:~$ ls -rR ~/cis106/
/home/mthussan/cis106/:

```

```

weekReports  finalProject
labs         cheatSheets

/home/mthussan/cis106/weekReports:
wr4-p2.4.png  wr4-p1.png  fs1.3.png
wr4-p2.3.png  wr4.md      fs1.2.png
wr4-p2.2.png  wr3.pdf     fs1.1.png
wr4-p2.1.png  wr3.md

/home/mthussan/cis106/labs:
'lab 4'  'lab 3'  'lab 2'  'lab 1'

'/home/mthussan/cis106/labs/lab 4':
lab4.pdf      lab4.3.5.png  lab4.2.5.png
lab4.md       lab4.3.4.png  lab4.2.4.png
lab4.5.2.png  lab4.3.3.png  lab4.2.3.png
lab4.5.1.png  lab4.3.2.png  lab4.2.2.png
lab4.3.9.png  lab4.3.1.png  lab4.2.1.png
lab4.3.8.png  lab4.3.11.png lab4.1.png
lab4.3.7.png  lab4.3.10.png
lab4.3.6.png  lab4.2.png

'/home/mthussan/cis106/labs/lab 3':
q2.1.png  q1.1.png  lab3.pdf  lab3.md

'/home/mthussan/cis106/labs/lab 2':
q4.PNG  q2.PNG  q1.1.PNG  lab2.md
q3.PNG  q1.2.PNG  lab2.pdf

```

```

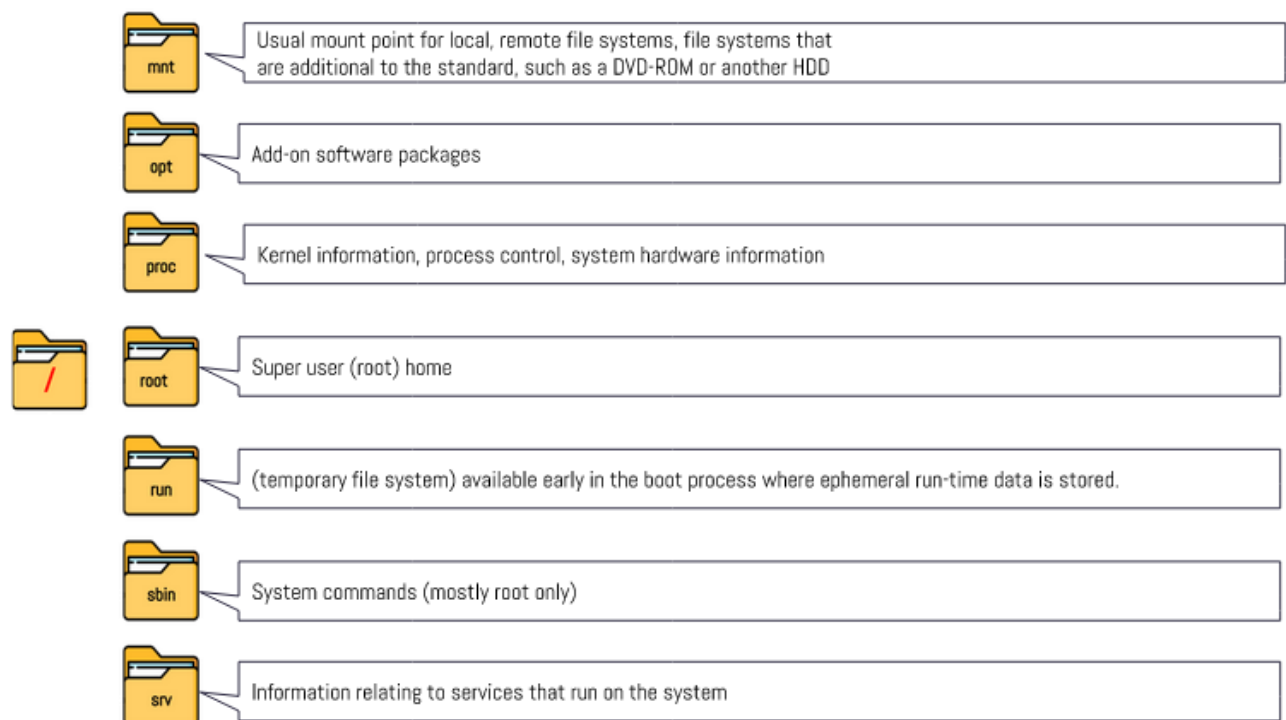
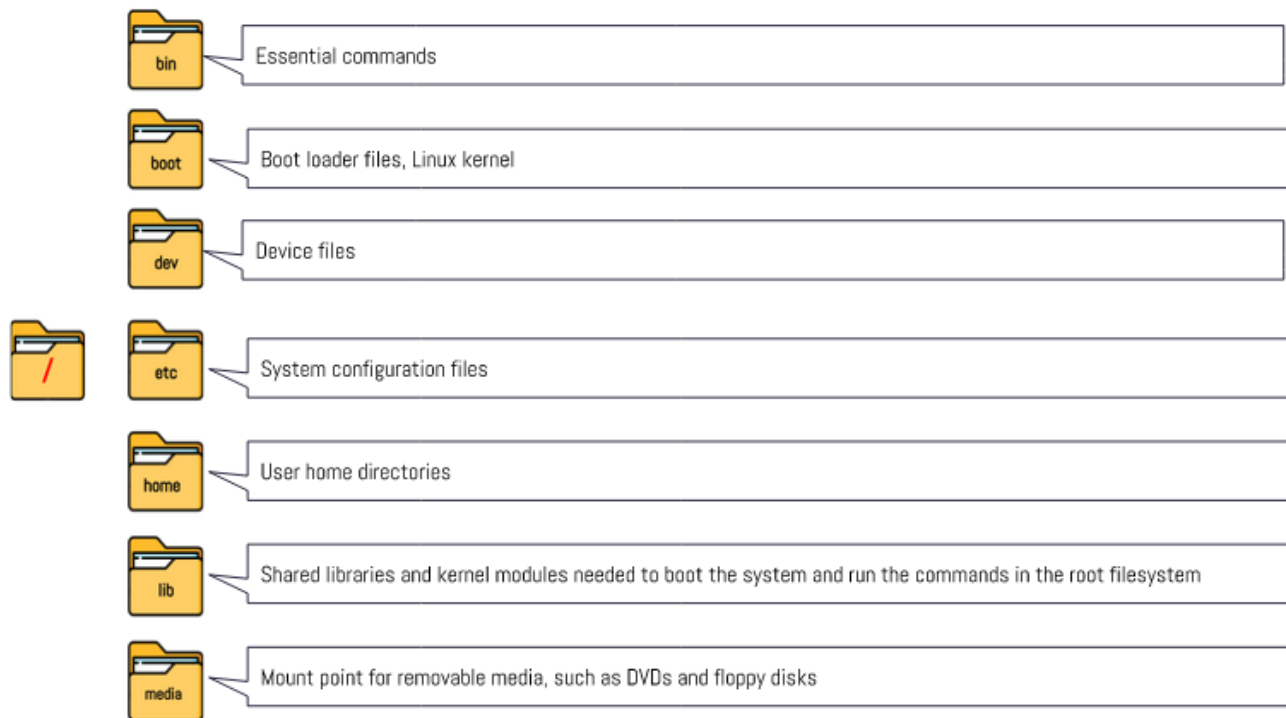
'/home/mthussan/cis106/labs/lab 1':
whatisubuntu.txt
what_is_ubuntu_submission.pdf
what_is_ubuntu_submission.md
what_is_ubuntu_submission.html
ubuntu-logo.png
ubuntu-desktop.png
resume.png
john_doe_resume_submission.pdf
john_doe_resume_submission.md
john_doe_resume_submission.html
johndoe.jpeg
johndoeinfo.txt

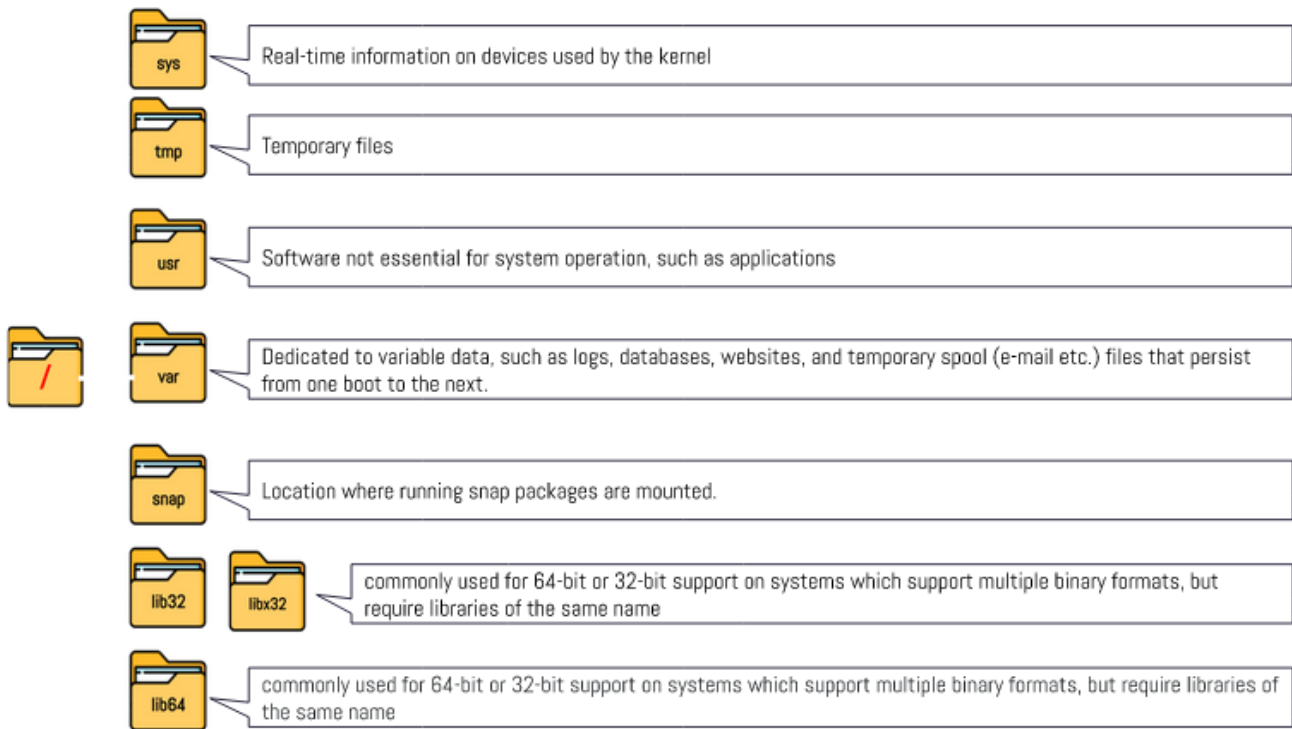
/home/mthussan/cis106/finalProject:

/home/mthussan/cis106/cheatSheets:
'Linux Workshop Ubuntu Software installation cheat sheet.png'
mthussan@CIS106:~$ ls -lh ~
total 2.2M
drwxrwxr-x 7 mthussan mthussan 4.0K Mar  8 17:48 cis106
drwxr-xr-x 2 mthussan mthussan 4.0K Mar 18 22:24 Desktop
drwxr-xr-x 2 mthussan mthussan 4.0K Feb 14 15:25 Documents
drwxr-xr-x 2 mthussan mthussan 4.0K Mar 18 19:25 Downloads
drwxrwxr-x 2 mthussan mthussan 4.0K Feb 22 2022 lab4files
drwxr-xr-x 2 mthussan mthussan 4.0K Feb 14 15:25 Music
drwxr-xr-x 2 mthussan mthussan 4.0K Mar 18 19:19 Pictures
drwxrwxr-x 2 mthussan mthussan 4.0K Feb 27 2022 practicels
drwxrwxr-x 2 mthussan mthussan 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 mthussan mthussan 2.2M Feb 21 21:10 practicels.tar.xz
drwxr-xr-x 2 mthussan mthussan 4.0K Feb 14 15:25 Public
drwx----- 5 mthussan mthussan 4.0K Feb 14 16:35 snap
drwxr-xr-x 2 mthussan mthussan 4.0K Feb 14 15:25 Templates
drwxr-xr-x 2 mthussan mthussan 4.0K Feb 14 15:25 Videos
mthussan@CIS106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
mthussan@CIS106:~$ ls -ls -lgG -10:40 ~
ls: invalid option -- '0'
Try 'ls --help' for more information.
mthussan@CIS106:~$

```

The Linux File System Directories and Their Purpose:





All The Commands For Navigating the Filesystem

Command	What It Does	Syntax	Example
pwd	prints current directory	pwd	pwd
cd	Changes the current directory to a specified directory.	cd [DIRECTORY]	cd /home/user/documents
ls	Lists the files and directories in the current directory.	ls [OPTIONS] [FILE]	ls /home/user/documents

Basic Terminology

- **File System:** A file system is a method used to organize and store files on a computer. It defines the way files are named, stored, retrieved, and updated on a storage device, such as a hard disk drive, solid-state drive, or USB drive.
- **Current Directory:** The current directory is the directory that a user is currently working in, or the directory that is currently displayed in a terminal or file manager.
- **Parent Directory:** The parent directory is the directory that contains the current directory. It is represented by two dots ".." and can be used in a file path to navigate up one level in the directory tree.
- **The difference between between your home directory and the home directory:** "your home directory" refers to the specific directory that is assigned to the current user as their personal directory, while "the home directory" refers to the directory that contains all home directories on the system.
- **pathname:** A pathname is a string that specifies the location of a file or directory in a file system. It can be represented as an absolute path or a relative path.
- **relative path:** A relative path is a pathname that specifies the location of a file or directory relative to the current directory. It does not start with a slash (/) and may include special characters like ".." to

navigate up in the directory tree.

- **absolute path:** An absolute path is a pathname that specifies the exact location of a file or directory in a file system. It starts with a slash (/) and includes the entire directory path from the root directory to the file or directory.