## Basics

## Unix/Linux

### Shell

sh shell

csh c-shell

zsh zeeshell

tsh

tcsh

bash born-again

### Linux flavors

ubuntu

debian

kali

raspbian

redhat

centOS

Fedora

### misc

directory == folder

command options operand

mkdir captain

ls -l

cd captain

### basic commands

clear clear the screen

date

cal

who

alias

unalias

### dir & file commands

pwd

cd change

cd captain

cd ..

cd .

cd ~ (home)

mkdir create directory

ls list

cat

cp copying

mv move

renaming

rm remove

rmdir remove an empty directory

rm -r remove a full directory

## file system

### various file systems

fat

file allocation table

fat32

fat64

ntfs

new tech file system

apfs

apple file system

ext3/4

journaling

### inode

unique number given to every file

inode data struct

all info file

### types of files

- regular

d directory

p pipe/fifo

b block device driver

c char device diver

s socket

### path

relative path

step by step

/amazon/hyd15/floor2/room7/chair5

cd ..

/amazon/hyd15/floor2/room7/

cd ..

/amazon/hyd15/floor2

cd ..

/amazon/hyd15

cd floor3

/amazon/hyd15/floor3/

cd room6

/amazon/hyd15/floor3/room6

cd chair2

/amazon/hyd15/floor3/room6/chair2

absolute path

/amazon/hyd15/floor2/room7/chair5

cd /amazon/hyd15/floor3/room6/chair2

/amazon/hyd15/floor2/room7/chair5

### permissions

participants.xlsx

user group others

r w x r w - r - -

1 1 1 1 1 0 1 0 0

7 6 4

### users & groups

every user belongs to a group

u g o r w x

o+r read for others

+r read for all

g-w remove write permissions for group

writing into folder → creating new files

reading a folder → viewing list of files & folders

executing folder → can’t even cd

#### root

super user

### open file descriptors

stdin 0

stdout 1

stderr 2

hello.txt 3