1. Create the following directories and files following the hierarchy structure

```
                              /home/user1

        HR              Operations              Finance

  Test1, Test2, Test3   Operation1, Operation2   Finance1, Finance2
```
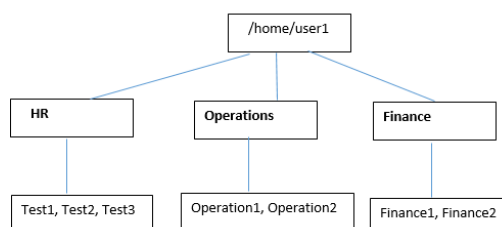
```
root@amutheswaran:/home# ls
amutheswaran
root@amutheswaran:/home# mkdir user1
root@amutheswaran:/home# ls
amutheswaran   user1
root@amutheswaran:/home# cd user1
root@amutheswaran:/home/user1# mkdir HR
root@amutheswaran:/home/user1# mkdir Finance
root@amutheswaran:/home/user1# mkdir Operations
root@amutheswaran:/home/user1# ls
Finance   HR   Operations
root@amutheswaran:/home/user1# cd HR
root@amutheswaran:/home/user1/HR# touch Test1
root@amutheswaran:/home/user1/HR# touch Test2
root@amutheswaran:/home/user1/HR# touch Test3
root@amutheswaran:/home/user1/HR# ls
Test1   Test2   Test3
root@amutheswaran:/home/user1/HR# cd ../
root@amutheswaran:/home/user1# cd Operations
root@amutheswaran:/home/user1/Operations# touch Operation1
root@amutheswaran:/home/user1/Operations# touch Operation2
root@amutheswaran:/home/user1/Operations# ls
Operation1   Operation2
root@amutheswaran:/home/user1/Operations# cd ../
root@amutheswaran:/home/user1# cd Finance
root@amutheswaran:/home/user1/Finance# touch Finance1
root@amutheswaran:/home/user1/Finance# touch Finance2
root@amutheswaran:/home/user1/Finance# ls
Finance1   Finance2
```

```
root@amutheswaran:/home/user1# ls -l -R
.:
total 12
drwxr-xr-x 2 root root 4096 Jul 30 09:59 Finance
drwxr-xr-x 2 root root 4096 Jul 30 09:58 HR
drwxr-xr-x 2 root root 4096 Jul 30 09:59 Operations

./Finance:
total 0
-rw-r--r-- 1 root root 0 Jul 30 09:59 Finance1
-rw-r--r-- 1 root root 0 Jul 30 09:59 Finance2

./HR:
total 0
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test1
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test2
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test3

./Operations:
total 0
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation1
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation2
root@amutheswaran:/home/user1#
```

2. Copy the test1 file from HR directories to Finance directories

```
root@amutheswaran:/home/user1# cd HR
root@amutheswaran:/home/user1/HR# cp Test1 /home/user1/Finance
root@amutheswaran:/home/user1/HR# cd ../
root@amutheswaran:/home/user1# cd Finance/
root@amutheswaran:/home/user1/Finance# ls
Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Finance#
```

3. Create a directory called Account under the Finance directory

```
root@amutheswaran:/home/user1/Finance# mkdir Account
root@amutheswaran:/home/user1/Finance# ls
Account  Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Finance#
```

4. Create files Account1.csv, Account2.csv under Account directory

a. Write below content (Account1.csv)

b. Write below content (Account2.csv)

```
root@amutheswaran:/home/user1/Finance# cd Account
root@amutheswaran:/home/user1/Finance/Account# cat > Account1.csv
ParticularName,ExpensesDate,Amount
Busfare,12-Jul-2005,2000
Coffeefare,10-Apr-2010,5000
Cabfare,12-Jul-2015,8000
Snacks,10-Apr-2018,10000
Dinner,10-Apr-2018,7000
Breakfast,10-Jun-2015,3500
root@amutheswaran:/home/user1/Finance/Account# cat > Account2.csv
User_Name,Name,Job Title,Office_Phone,State,Country
chris@contoso.com,Chris Green,IT Manager,123-555-1211,WA,United States
ben@contoso.com,Ben Andrews,IT Manager,123-555-1212,TX,United States
david@contoso.com,David Longmuir,IT Lead,123-555-1213,CH,India
cynthia@contoso.com,Cynthia Carey,IT Team Lead,123-555-1214,DL,India
melissa@contoso.com,Melissa MacBeth,IT Team Lead,123-555-1215,WA,United States
root@amutheswaran:/home/user1/Finance/Account# ls
Account1.csv  Account2.csv
root@amutheswaran:/home/user1/Finance/Account#
```

5. Copy all the entire structure of Finance directory to Operation directory

```
root@amutheswaran:/home/user1/Finance/Account# cd ../../
root@amutheswaran:/home/user1# cp Finance -R /home/user1/Operations
root@amutheswaran:/home/user1# cd Operations
root@amutheswaran:/home/user1/Operations# ls -R
.:
Finance  Operation1  Operation2

./Finance:
Account  Finance1  Finance2  Test1
```

6. Rename Account2.csv to Employee.csv

```
root@amutheswaran:/home/user1/Operations/Finance/Account# ls
Account1.csv  Account2.csv
root@amutheswaran:/home/user1/Operations/Finance/Account# mv Account2.csv Employee.csv
root@amutheswaran:/home/user1/Operations/Finance/Account# ls
Account1.csv  Employee.csv
root@amutheswaran:/home/user1/Operations/Finance/Account#
```

7. Move the file Test1 to Operations

```
root@amutheswaran:/home/user1/Operations/Finance/Account# cd ../../
root@amutheswaran:/home/user1/Operations# ls
Finance  Operation1  Operation2
root@amutheswaran:/home/user1/Operations# cd Finance
root@amutheswaran:/home/user1/Operations/Finance# ls
Account  Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Operations/Finance# mv Test1 /home/user1/Operations
root@amutheswaran:/home/user1/Operations/Finance# ls
Account  Finance1  Finance2
root@amutheswaran:/home/user1/Operations/Finance# cd ../
root@amutheswaran:/home/user1/Operations# ls
Finance  Operation1  Operation2  Test1
root@amutheswaran:/home/user1/Operations# 
```

8. Move all the files from HR directory Operation directory

```
root@amutheswaran:/home/user1# cd HR
root@amutheswaran:/home/user1/HR# ls
Test1  Test2  Test3
root@amutheswaran:/home/user1/HR# mv ./* /home/user1/Operations
root@amutheswaran:/home/user1/HR# cd ../
root@amutheswaran:/home/user1# cd Operations
root@amutheswaran:/home/user1/Operations# ls
Finance  Operation1  Operation2  Test1  Test2  Test3
root@amutheswaran:/home/user1/Operations#
```

9. Delete all the files which is present in HR directory

```
root@amutheswaran:/home/user1/Operations# cd /home/user1/HR
root@amutheswaran:/home/user1/HR# ls -a
.  ..
root@amutheswaran:/home/user1/HR# touch temp1.txt
root@amutheswaran:/home/user1/HR# touch temp2.txt
root@amutheswaran:/home/user1/HR# ls
temp1.txt  temp2.txt
root@amutheswaran:/home/user1/HR# rm ./*
```

10. Remove the entire Finance directory from Operation directory

```
root@amutheswaran:/home/user1# ls
Finance  HR  Operations
root@amutheswaran:/home/user1# cd Operations
root@amutheswaran:/home/user1/Operations# ls
Finance  Operation1  Operation2  Test1  Test2  Test3
root@amutheswaran:/home/user1/Operations# rm -R Finance
root@amutheswaran:/home/user1/Operations# ls
Operation1  Operation2  Test1  Test2  Test3
root@amutheswaran:/home/user1/Operations# 
```

11. Display the content of Account2.csv

```
root@amutheswaran:/home/user1/Finance# ls
Account  Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Finance# cd Account
root@amutheswaran:/home/user1/Finance/Account# ls
Account1.csv  Account2.csv
root@amutheswaran:/home/user1/Finance/Account# cat Account2.csv
User_Name,Name,Job Title,Office_Phone,State,Country
chris@contoso.com,Chris Green,IT Manager,123-555-1211,WA,United States
ben@contoso.com,Ben Andrews,IT Manager,123-555-1212,TX,United States
david@contoso.com,David Longmuir,IT Lead,123-555-1213,CH,India
cynthia@contoso.com,Cynthia Carey,IT Team Lead,123-555-1214,DL,India
melissa@contoso.com,Melissa MacBeth,IT Team Lead,123-555-1215,WA,United States
root@amutheswaran:/home/user1/Finance/Account#
```

12. List all the files which is present in Finance directory except directory.

```
root@amutheswaran:/home/user1/Finance# find . -maxdepth 1 -type f
./Finance1
./Test1
./Finance2
root@amutheswaran:/home/user1/Finance# find . -type f
./Finance1
./Test1
./Finance2
./Account/Account1.csv
./Account/Account2.csv
root@amutheswaran:/home/user1/Finance#
```

13. Display all the users connected to Ubuntu

```
root@amutheswaran:/home/user1/Finance# w
 11:08:14 up  1:24,  3 users,  load average: 0.99, 0.42, 0.25
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
amuthesw tty2     tty2             09:43    1:24m  0.00s  0.00s /usr/libexec/gnome-session-binary --sess
amuthesw pts/1    -                09:47    0.00s  0.12s  0.10s sudo -i
amuthesw pts/3    -                10:27    35:10  0.04s  0.04s sudo -i
root@amutheswaran:/home/user1/Finance# who
amutheswaran tty2          2022-07-30 09:43 (tty2)
amutheswaran pts/1         2022-07-30 09:47
amutheswaran pts/3         2022-07-30 10:27
root@amutheswaran:/home/user1/Finance#
```

14. Search for all the files starting with T from the home directory

```
root@amutheswaran:/home# find . -type f -iname "T*"
./amutheswaran/Downloads/firefox.tmp/tmpaddon
./amutheswaran/snap/firefox/common/.mozilla/firefox/il3onje0.default/times.json
./amutheswaran/Desktop/text.txt
./amutheswaran/.local/share/nautilus/tracker2-migration-complete
./amutheswaran/.local/share/evolution/tasks/system/tasks.ics
./user1/Finance/Test1
./user1/Operations/Test3
./user1/Operations/Test1
./user1/Operations/Test2
root@amutheswaran:/home# find . -type f -name "T*"
./user1/Finance/Test1
./user1/Operations/Test3
./user1/Operations/Test1
./user1/Operations/Test2
root@amutheswaran:/home#
```

15. Create hidden file called "Test" under Finance directory

```
root@amutheswaran:/home/user1# cd Finance
root@amutheswaran:/home/user1/Finance# ls
Account  Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Finance# touch .Test
root@amutheswaran:/home/user1/Finance# ls
Account  Finance1  Finance2  Test1
root@amutheswaran:/home/user1/Finance# ls -a
.  ..  Account  Finance1  Finance2  .Test  Test1
root@amutheswaran:/home/user1/Finance#
```

16. Filters
a. Perform following operations with Account2.csv

i. Display the Name in sorted order

```
root@amutheswaran:/home/user1/Finance/Account# cat Account2.csv
User_Name,Name,Job Title,Office_Phone,State,Country
chris@contoso.com,Chris Green,IT Manager,123-555-1211,WA,United States
ben@contoso.com,Ben Andrews,IT Manager,123-555-1212,TX,United States
david@contoso.com,David Longmuir,IT Lead,123-555-1213,CH,India
cynthia@contoso.com,Cynthia Carey,IT Team Lead,123-555-1214,DL,India
melissa@contoso.com,Melissa MacBeth,IT Team Lead,123-555-1215,WA,United States
root@amutheswaran:/home/user1/Finance/Account# sort Account2.csv
ben@contoso.com,Ben Andrews,IT Manager,123-555-1212,TX,United States
chris@contoso.com,Chris Green,IT Manager,123-555-1211,WA,United States
cynthia@contoso.com,Cynthia Carey,IT Team Lead,123-555-1214,DL,India
david@contoso.com,David Longmuir,IT Lead,123-555-1213,CH,India
melissa@contoso.com,Melissa MacBeth,IT Team Lead,123-555-1215,WA,United States
User_Name,Name,Job Title,Office_Phone,State,Country
root@amutheswaran:/home/user1/Finance/Account#
```

ii. Display the no of employees staying in India

```
root@amutheswaran:/home/user1/Finance/Account# awk '/India/ {print}' Account2.csv
david@contoso.com,David Longmuir,IT Lead,123-555-1213,CH,India
cynthia@contoso.com,Cynthia Carey,IT Team Lead,123-555-1214,DL,India
root@amutheswaran:/home/user1/Finance/Account#
```

iii. Display the content in upper case

```
root@amutheswaran:/home/user1/Finance/Account# tr a-z A-Z < Account2.csv
USER_NAME,NAME,JOB TITLE,OFFICE_PHONE,STATE,COUNTRY
CHRIS@CONTOSO.COM,CHRIS GREEN,IT MANAGER,123-555-1211,WA,UNITED STATES
BEN@CONTOSO.COM,BEN ANDREWS,IT MANAGER,123-555-1212,TX,UNITED STATES
DAVID@CONTOSO.COM,DAVID LONGMUIR,IT LEAD,123-555-1213,CH,INDIA
CYNTHIA@CONTOSO.COM,CYNTHIA CAREY,IT TEAM LEAD,123-555-1214,DL,INDIA
MELISSA@CONTOSO.COM,MELISSA MACBETH,IT TEAM LEAD,123-555-1215,WA,UNITED STATES
root@amutheswaran:/home/user1/Finance/Account#
```

iv. Display all the Name starting with "B"

```
root@amutheswaran:/home/user1/Finance/Account# cat Account2.csv | grep  ".*,B.*"
ben@contoso.com,Ben Andrews,IT Manager,123-555-1212,TX,United States
root@amutheswaran:/home/user1/Finance/Account#
```

b. Perform following operations with Account1.csv
i. Display two columns (ExpensesDate,Amount)

```
root@amutheswaran:/home/user1/Finance/Account# awk -F "\"*,\"*"  '{print $2,$3}' Account1.csv
ExpensesDate Amount
12-Jul-2005 2000
10-Apr-2010 5000
12-Jul-2015 8000
10-Apr-2018 10000
10-Apr-2018 7000
10-Jun-2015 3500
root@amutheswaran:/home/user1/Finance/Account#
```

ii. Display the details of 10-Apr-2018

```
root@amutheswaran:/home/user1/Finance/Account# awk '/10-Apr-2018/ {print}' Account1.csv
Snacks,10-Apr-2018,10000
Dinner,10-Apr-2018,7000
root@amutheswaran:/home/user1/Finance/Account#
```

17. Display all the process running in the Ubuntu system

```
root@amutheswaran:/home/user1/Finance/Account# ps
    PID TTY          TIME CMD
   2053 pts/1    00:00:00 sudo
   2054 pts/1    00:00:00 bash
  14214 pts/1    00:00:00 ps
root@amutheswaran:/home/user1/Finance/Account# ps -r
    PID TTY       STAT   TIME COMMAND
  14230 pts/1    R+     0:00 ps -r
root@amutheswaran:/home/user1/Finance/Account#
```

18. Create two files under HR directory

a. Sample1.txt
b. Sample2.txt

```
root@amutheswaran:/home/user1# cd HR
root@amutheswaran:/home/user1/HR# ls
root@amutheswaran:/home/user1/HR# touch Sample1.txt
root@amutheswaran:/home/user1/HR# touch Sample2.txt
root@amutheswaran:/home/user1/HR# ls
Sample1.txt   Sample2.txt
root@amutheswaran:/home/user1/HR#
```

19. Permissions

a.   Give read only permission for all the files which is in Operation directory

```
root@amutheswaran:/home/user1/Operations# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation1
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation2
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test1
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test2
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test3
root@amutheswaran:/home/user1/Operations# chmod 0444 /home/user1/Operations
root@amutheswaran:/home/user1/Operations# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation1
-rw-r--r-- 1 root root 0 Jul 30 09:59 Operation2
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test1
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test2
-rw-r--r-- 1 root root 0 Jul 30 09:58 Test3
root@amutheswaran:/home/user1/Operations# chmod -R 0444 /home/user1/Operations
root@amutheswaran:/home/user1/Operations# ls -l
total 0
-r--r--r-- 1 root root 0 Jul 30 09:59 Operation1
-r--r--r-- 1 root root 0 Jul 30 09:59 Operation2
-r--r--r-- 1 root root 0 Jul 30 09:58 Test1
-r--r--r-- 1 root root 0 Jul 30 09:58 Test2
-r--r--r-- 1 root root 0 Jul 30 09:58 Test3
root@amutheswaran:/home/user1/Operations#
```

b.   Remove all the permission for the files which is in Finance directory

```
root@amutheswaran:/home/user1/Finance# ls -l
total 4
drwxr-xr-x 2 root root 4096 Jul 30 10:13 Account
-rw-r--r-- 1 root root    0 Jul 30 09:59 Finance1
-rw-r--r-- 1 root root    0 Jul 30 09:59 Finance2
-rw-r--r-- 1 root root    0 Jul 30 10:06 Test1
root@amutheswaran:/home/user1/Finance# chmod -rwx ./*
root@amutheswaran:/home/user1/Finance# ls -l
total 4
d--------- 2 root root 4096 Jul 30 10:13 Account
---------- 1 root root    0 Jul 30 09:59 Finance1
---------- 1 root root    0 Jul 30 09:59 Finance2
---------- 1 root root    0 Jul 30 10:06 Test1
root@amutheswaran:/home/user1/Finance#
```

c.   Give write and execute for all the files which is in HR directory

```
root@amutheswaran:/home/user1/HR# ls -l
total 0
-rw-r--r-- 1 root root 0 Jul 30 14:40 Sample1.txt
-rw-r--r-- 1 root root 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR# chmod -r ./*
root@amutheswaran:/home/user1/HR# chmod +x ./*
root@amutheswaran:/home/user1/HR# ls -l
total 0
--wx--x--x 1 root root 0 Jul 30 14:40 Sample1.txt
--wx--x--x 1 root root 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR#
```

d.   Change the owner of Sample1.txt to Test2 user

```
root@amutheswaran:/home/user1/HR# ls -l
total 0
--wx--x--x 1 root root 0 Jul 30 14:40 Sample1.txt
--wx--x--x 1 root root 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR# chown Test2 Sample1.txt
root@amutheswaran:/home/user1/HR# ls -l
total 0
--wx--x--x 1 Test2 root 0 Jul 30 14:40 Sample1.txt
--wx--x--x 1 root  root 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR#
```

e.   Change the group of Sample2.txt to Test1 user

```
root@amutheswaran:/home/user1/HR# ls -l
total 0
--wx--x--x 1 Test2 root 0 Jul 30 14:40 Sample1.txt
--wx--x--x 1 root  root 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR# chgrp Test1 Sample2.txt
root@amutheswaran:/home/user1/HR# ls -l
total 0
--wx--x--x 1 Test2 root  0 Jul 30 14:40 Sample1.txt
--wx--x--x 1 root  Test1 0 Jul 30 14:40 Sample2.txt
root@amutheswaran:/home/user1/HR#
```

20. Create users
   a.   Test1
   b.   Test2

```
root@amutheswaran:/# cut -d: -f1 /etc/passwd | column
root                    www-data                tss                     sssd
daemon                  backup                  uuidd                   speech-dispatcher
bin                     list                    systemd-oom             nm-openvpn
sys                     irc                     tcpdump                 saned
sync                    gnats                   avahi-autoipd           colord
games                   nobody                  usbmux                  geoclue
man                     systemd-network         dnsmasq                 pulse
lp                      systemd-resolve         kernoops                gnome-initial-setup
mail                    messagebus              avahi                   hplip
news                    systemd-timesync        cups-pk-helper          gdm
uucp                    syslog                  rtkit                   amutheswaran
proxy                   _apt                    whoopsie
root@amutheswaran:/# sudo useradd Test1
root@amutheswaran:/# sudo useradd Test2
root@amutheswaran:/# cut -d: -f1 /etc/passwd | column
root                    backup                  systemd-oom             saned
daemon                  list                    tcpdump                 colord
bin                     irc                     avahi-autoipd           geoclue
sys                     gnats                   usbmux                  pulse
sync                    nobody                  dnsmasq                 gnome-initial-setup
games                   systemd-network         kernoops                hplip
man                     systemd-resolve         avahi                   gdm
lp                      messagebus              cups-pk-helper          amutheswaran
mail                    systemd-timesync        rtkit                   Test1
news                    syslog                  whoopsie                Test2
uucp                    _apt                    sssd
proxy                   tss                     speech-dispatcher
www-data                uuidd                   nm-openvpn
root@amutheswaran:/#
```

21. Display the command to view all the users which is existing in the system

```
root@amutheswaran:/# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105::/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:115::/run/uuidd:/usr/sbin/nologin
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:121:128::/var/lib/saned:/usr/sbin/nologin
colord:x:122:129:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:123:130::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:124:131:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:125:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
amutheswaran:x:1000:1000:amutheswaran,,,:/home/amutheswaran:/bin/bash
Test1:x:1001:1001::/home/Test1:/bin/sh
Test2:x:1002:1002::/home/Test2:/bin/sh
root@amutheswaran:/# 
```

22. Create a compressed file for the Finance directory

```
root@amutheswaran:/home/user1# ls
Finance  HR  Operations
root@amutheswaran:/home/user1# zip -r Finance.zip ./Finance
  adding: Finance/ (stored 0%)
  adding: Finance/Finance1 (stored 0%)
  adding: Finance/.Test (stored 0%)
  adding: Finance/Test1 (stored 0%)
  adding: Finance/Finance2 (stored 0%)
  adding: Finance/Account/ (stored 0%)
  adding: Finance/Account/Account1.csv (deflated 32%)
  adding: Finance/Account/Account2.csv (deflated 48%)
root@amutheswaran:/home/user1# ls
Finance  Finance.zip  HR  Operations
root@amutheswaran:/home/user1#
```