












CentOS 7 64-bit

 [Power on this virtual machine](#)

 [Edit virtual machine settings](#)

▼ Devices

 Memory	1 GB
 Processors	2
 Hard Disk (SCSI)	20 GB
 Hard Disk 3 (SCSI)	200 GB
 Hard Disk 2 (SCSI)	100 GB
 CD/DVD (IDE)	Using file D:\Ma...
 Network Adapter	NAT
 USB Controller	Present
 Sound Card	Auto detect
 Printer	Present
 Display	Auto detect

▼ Description

Type here to enter a description of this virtual machine.



▼ Virtual Machine Details

State: Powered off

Snapshot: begin

Configuration file: D:\MayAo\centOS7\CentOS 7 64-bit.vmx

Hardware compatibility: Workstation 15.x virtual machine

Primary IP address: Network information is not available

```
fusectl on /sys/fs/fuse/connections type fusectl (rw,relatime)
/dev/sr0 on /run/media/root/CentOS 7 x86_64 type iso9660 (ro,nosuid,node
/dev/sdb1 on /b1 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdb2 on /b2 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdb3 on /b3 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdb6 on /b5 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdc1 on /c1 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdc2 on /c2 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdc3 on /c3 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdc5 on /c5 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdc6 on /c6 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/sdb5 on /b5 type ext4 (rw,relatime,seclabel,data=ordered)
[root@nttrangN05 ~]# date
Thu Feb 24 01:42:28 EST 2022
[root@nttrangN05 ~]# █
```

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I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk label type: dos

Disk identifier: 0xd2b44953

Device	Boot	Start	End	Blocks	Id	System
/dev/sdc1		2048	10242047	5120000	83	Linux
/dev/sdc2		10242048	30722047	10240000	83	Linux
/dev/sdc3		30722048	61442047	15360000	83	Linux
/dev/sdc4		61442048	419430399	178994176	5	Extended
/dev/sdc5		61444096	102404095	20480000	83	Linux
/dev/sdc6		102406144	419430399	158512128	83	Linux

Disk /dev/sda: 21.5 GB, 21474836480 bytes, 41943040 sectors

Units = sectors of 1 * 512 = 512 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk label type: dos

Disk identifier: 0x000abf74

Device	Boot	Start	End	Blocks	Id	System
/dev/sda1	*	2048	2099199	1048576	83	Linux
/dev/sda2		2099200	41943039	19921920	8e	Linux LVM

Disk /dev/sdb: 107.4 GB, 107374182400 bytes, 209715200 sectors

Units = sectors of 1 * 512 = 512 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk label type: dos

Disk identifier: 0x8dca76e2

Device	Boot	Start	End	Blocks	Id	System
/dev/sdb1		2048	10242047	5120000	83	Linux
/dev/sdb2		10242048	30722047	10240000	83	Linux
/dev/sdb3		30722048	61442047	15360000	83	Linux
/dev/sdb4		61442048	209715199	74136576	5	Extended
/dev/sdb5		61444096	102404095	20480000	83	Linux
/dev/sdb6		102406144	209715199	53654528	83	Linux

Disk /dev/mapper/centos-root: 18.2 GB, 18249416704 bytes, 35643392 sectors

Units = sectors of 1 * 512 = 512 bytes

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```
[root@nttrangN05 ~]# mount -a
[root@nttrangN05 ~]# mount
sysfs on /sys type sysfs (rw,nosuid,nodev,noexec,relatime,seclabel)
proc on /proc type proc (rw,nosuid,nodev,noexec,relatime)
devtmpfs on /dev type devtmpfs (rw,nosuid,seclabel,size=480852k,nr_inodes=120213,mode=755)
devpts on /dev/pts type devpts (rw,nosuid,noexec,relatime,seclabel,gid=5,mode=620,ptmxmode=000)
tmpfs on /run type tmpfs (rw,nosuid,nodev,seclabel,mode=755)
tmpfs on /sys/fs/cgroup type tmpfs (ro,nosuid,nodev,noexec,seclabel,mode=755)
cgroup on /sys/fs/cgroup/systemd type cgroup (rw,nosuid,nodev,noexec,relatime,seclabel,xattr,release_agent=/usr/lib/systemd/systemd-cgroups-agent,name=systemd)
/dev/mapper/centos-root on / type xfs (rw,relatime,seclabel,attr2,inode64,noquota)
selinuxfs on /sys/fs/selinux type selinuxfs (rw,relatime)
sunrpc on /var/lib/nfs/rpc_pipefs type rpc_pipefs (rw,relatime)
tmpfs on /run/user/42 type tmpfs (rw,nosuid,nodev,relatime,seclabel,size=99596k,mode=700,uid=42,gid=42)
tmpfs on /run/user/0 type tmpfs (rw,nosuid,nodev,relatime,seclabel,size=99596k,mode=700)
/dev/sr0 on /run/media/root/CentOS 7 x86_64 type iso9660 (ro,nosuid,nodev,relatime,uid=0,gid=0,iocharset=utf8,mode=0400,dmode=0500,uhelper=udisks2)
/dev/sda1 on /boot type xfs (rw,relatime,seclabel,attr2,inode64,noquota)
/dev/mapper/VolumeA-LV0 on /LV0 type ext4 (rw,relatime,seclabel,data=ordered)
/dev/mapper/VolumeA-LV1 on /LV1 type ext4 (rw,relatime,seclabel,data=ordered)
[root@nttrangN05 ~]# S
```

root@nttrangN05:~

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```
Physical volume "/dev/sdc6" successfully created.
[root@nttrangN05 ~]# vgextend VolumeA /dev/sdb5
Volume group "VolumeA" successfully extended
[root@nttrangN05 ~]# vgextend VolumeA /dev/sdc6
Volume group "VolumeA" successfully extended
[root@nttrangN05 ~]# lvextend -L 10000M /dev/VolumeA/LV0 /dev/sdb5
New size given (2500 extents) not larger than existing size (3000 extents)
[root@nttrangN05 ~]# lvextend -L +3000M /dev/VolumeA/LV0 /dev/sdb5
Size of logical volume VolumeA/LV0 changed from <11.72 GiB (3000 extents) to
<14.65 GiB (3750 extents).
Logical volume VolumeA/LV0 successfully resized.
[root@nttrangN05 ~]# lvextend -L +20000M /dev/VolumeA/LV1 /dev/sdc6
Size of logical volume VolumeA/LV1 changed from <12.21 GiB (3125 extents) to
<31.74 GiB (8125 extents).
Logical volume VolumeA/LV1 successfully resized.
[root@nttrangN05 ~]# date
Mon Feb 28 02:52:13 EST 2022
[root@nttrangN05 ~]#
```


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Calling ioctl() to re-read partition table.

Syncing disks.

```
[root@nttrangN05 ~]# mdadm --detail --scan --verbose
```

```
ARRAY /dev/md1 level=raid1 num-devices=2 metadata=1.2 name=nttrangN05:1 UUID=e115702d:d79a51ab:d165269d:7b670650
```

```
    devices=/dev/sdc1
```

```
[root@nttrangN05 ~]# mdadm --manage /dev/md1 --add /dev/sdb1
```

```
mdadm: added /dev/sdb1
```

```
[root@nttrangN05 ~]# mdadm --detail --scan --verbose
```

```
ARRAY /dev/md1 level=raid1 num-devices=2 metadata=1.2 spares=1 name=nttrangN05:1 UUID=e115702d:d79a51ab:d165269d:7b670650
```

```
    devices=/dev/sdb1,/dev/sdc1
```

```
[root@nttrangN05 ~]# cat /etc/mdadm.conf
```

```
ARRAY /dev/md1 level=raid1 num-devices=2 metadata=1.2 name=nttrangN05:1 UUID=e115702d:d79a51ab:d165269d:7b670650
```

```
    devices=/dev/sdb1,/dev/sdc1
```

```
[root@nttrangN05 ~]# cat /proc/mdstat
```

```
Personalities : [raid1]
```

```
md1 : active raid1 sdb1[2] sdc1[1]
```

```
    5114880 blocks super 1.2 [2/1] [_U]
```

```
    [=====>.....] recovery = 48.1% (2464256/5114880) finish=1.3
```

```
min speed=32344K/sec
```

```
unused devices: <none>
```

```
[root@nttrangN05 ~]# date
```

```
Thu Mar 3 02:12:16 EST 2022
```

```
[root@nttrangN05 ~]#
```

root@nttrangN05:~

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Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

```
[root@nttrangN05 ~]# mdadm --manage /dev/md5 --add /dev/sdb1
```

mdadm: added /dev/sdb1

```
[root@nttrangN05 ~]# cat /proc/mdstat
```

Personalities : [raid1] [raid6] [raid5] [raid4]

md1 : active (auto-read-only) raid1 sdc1[1]

5114880 blocks super 1.2 [2/1] [_U]

md5 : active raid5 sdb1[4] sdd2[3] sdc2[1]

20461568 blocks super 1.2 level 5, 512k chunk, algorithm 2 [3/2] [_UU]

[==>.....] recovery = 14.6% (1498496/10230784) finish=0.

8min speed=166499K/sec

unused devices: <none>

```
[root@nttrangN05 ~]# date
```

Thu Mar 3 03:06:28 EST 2022

```
[root@nttrangN05 ~]#
```

root@nttrangN05:~

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mdadm: added /dev/sdb1

[root@nttrangN05 ~]# cat /proc/mdstat

Personalities : [raid1] [raid6] [raid5] [raid4]

md1 : active (auto-read-only) raid1 sdc1[1]
5114880 blocks super 1.2 [2/1] [_U]

md5 : active raid5 sdb1[4] sdd2[3] sdc2[1]
20461568 blocks super 1.2 level 5, 512k chunk, algorithm 2 [3/2] [_UU]
[==>.....] recovery = 14.6% (1498496/10230784) finish=0.8min speed=166499K/sec

unused devices: <none>

[root@nttrangN05 ~]# date

Thu Mar 3 03:06:28 EST 2022

[root@nttrangN05 ~]# mdadm --examine

mdadm: No devices to examine

[root@nttrangN05 ~]# mdadm --examine /dev/md5

mdadm: No md superblock detected on /dev/md5.

[root@nttrangN05 ~]# mdadm --detail --scan --verbose

ARRAY /dev/md5 level=raid5 num-devices=3 metadata=1.2 name=nttrangN05:5 UUID=abc853f0:ca05470a:9136bf9d:4c85e721
devices=/dev/sdb1,/dev/sdc2,/dev/sdd2

ARRAY /dev/md/1 level=raid1 num-devices=2 metadata=1.2 name=nttrangN05:1 UUID=e115702d:d79a51ab:d165269d:7b670650
devices=/dev/sdc1

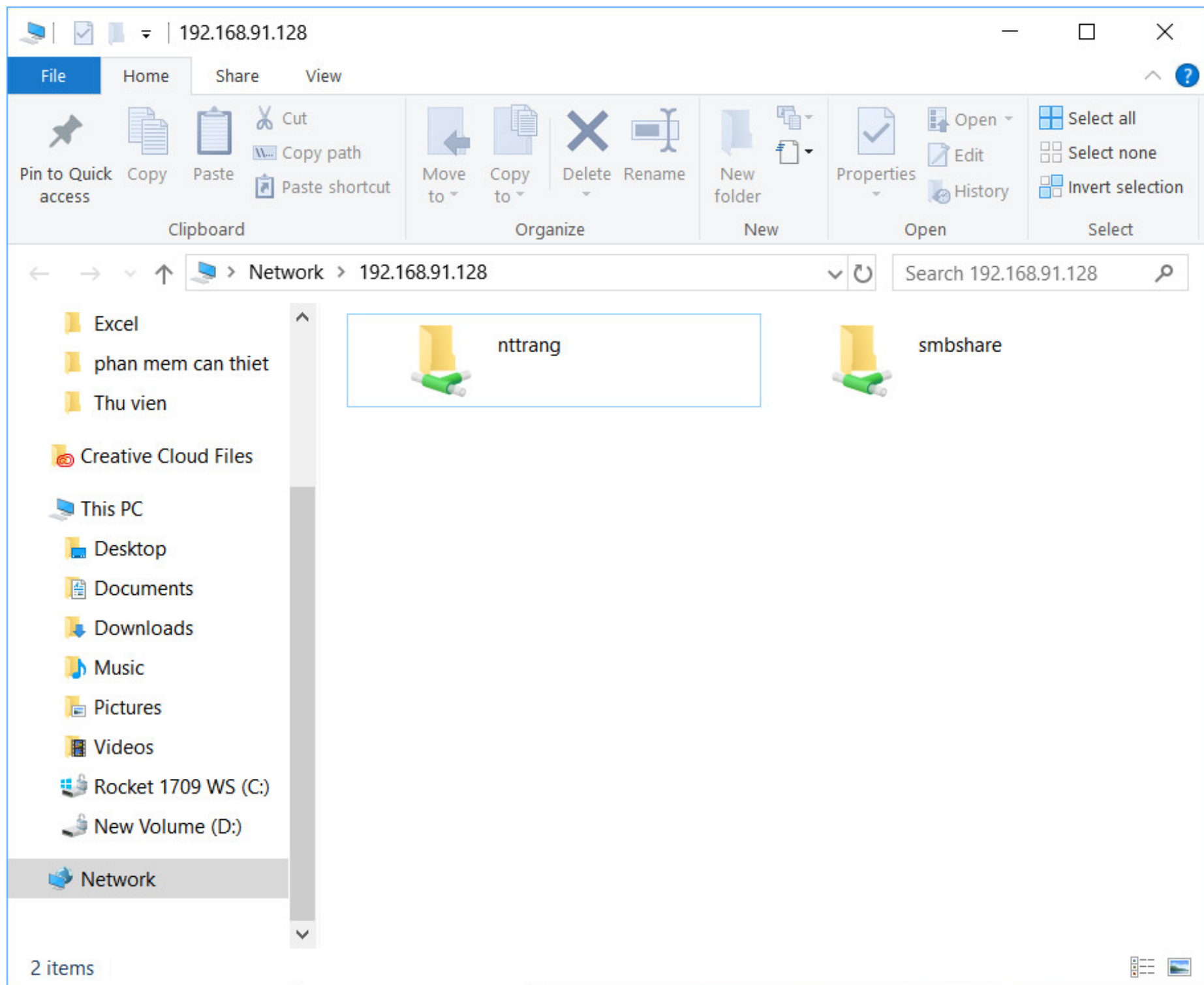
[root@nttrangN05 ~]# date

Thu Mar 3 03:13:16 EST 2022

[root@nttrangN05 ~]# date

Thu Mar 3 03:15:19 EST 2022

[root@nttrangN05 ~]#



root@nttrangN05:~

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firewall-cmd: error: unrecognized arguments: --permanent --add-port=137/tcp

[root@nttrangN05 ~]# smbclient //192.168.63.1/c\$ -U nttrang

Enter SAMBA\nttrang's password:

tree connect failed: NT_STATUS_ACCESS_DENIED

[root@nttrangN05 ~]# smbclient //192.168.63.1/Excel -U nttrang_

Enter SAMBA\nttrang_'s password:

Try "help" to get a list of possible commands.

smb: \> dir

.	D	0	Sat Feb 26 09:09:42 2022
..	D	0	Sat Feb 26 09:09:42 2022
LICH- THI.xlsx	A	10452	Sat Mar 13 08:30:09 2021
TKB.xlsx	A	10524	Tue Jan 4 23:01:06 2022

36140287 blocks of size 4096. 22352610 blocks available

smb: \> dir

.	D	0	Wed Mar 9 23:54:38 2022
..	D	0	Wed Mar 9 23:54:38 2022
LICH- THI.xlsx	A	10452	Sat Mar 13 08:30:09 2021
TKB.xlsx	A	10524	Tue Jan 4 23:01:06 2022
To la Windows day	D	0	Wed Mar 9 23:54:22 2022

36140287 blocks of size 4096. 22351586 blocks available

smb: \>

root@nttrangN05:~

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```
ode=700,uid=42,gid=42)
tmpfs on /run/user/0 type tmpfs (rw,nosuid,nodev,relatime,seclabel,size=99596k,mo
de=700)
/dev/sda1 on /boot type xfs (rw,relatime,seclabel,attr2,inode64,noquota)
192.168.1.1:/nfsshare on /nfsmount type nfs4 (rw,relatime,vers=4.1,rsize=131072,w
size=131072,namlen=255,hard,proto=tcp,timeo=600,retrans=2,sec=sys,clientaddr=192.
168.1.2,local_lock=none,addr=192.168.1.1)
[root@nttrangN05 ~]# date
Thu Mar 10 04:27:17 EST 2022
[root@nttrangN05 ~]#
```

root@nttrangN05:~



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```
le_mode=0755,dir_mode=0755,soft,nounix,serverino,mapposix,rsz=1048576,wsz=1048576,echo_interval=60,actimeo=1)
```

```
192.168.1.2:/nfsmusician on /nfsmount type nfs4 (rw,relatime,vers=4.1,rsz=131072,wsz=131072,namlen=255,hard,proto=tcp,timeo=600,retrans=2,sec=sys,clientaddr=192.168.1.1,local_lock=none,addr=192.168.1.2)
```

```
[root@nttrangN05 ~]# date
```

```
Thu Mar 10 04:53:15 EST 2022
```

```
[root@nttrangN05 ~]#
```

```
# Defaults      env_keep += "HOME"
%wheel          ALL=(ALL) ALL
%thaibinh       ALL=(ALL) ALL
%utc            ALL=(ALL) ALL
- - - - -
```


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```
[root@nttrangN05 ~]# useradd nttrang -g thaibinh -c "SV UTC"
[root@nttrangN05 ~]# useradd linux -c "HDH Linux" -G utc
[root@nttrangN05 ~]# useradd opensource -c "Ma nguon mo" -G thaibinh,utc
[root@nttrangN05 ~]# passwd nttrang
Changing password for user nttrang.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@nttrangN05 ~]# passwd Linux
passwd: Unknown user name 'Linux'.
[root@nttrangN05 ~]# passwd linux
Changing password for user linux.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@nttrangN05 ~]# passwd linux
Changing password for user linux.
New password:
BAD PASSWORD: The password is shorter than 7 characters
Retype new password:
Sorry, passwords do not match.
New password:
[root@nttrangN05 ~]# passwd opensource
Changing password for user opensource.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@nttrangN05 ~]# █
```

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```
[root@nttrangN05 ~]# su - nttrang
Last login: Wed Mar 16 23:37:29 EDT 2022 on tty2
[nttrang@nttrangN05 ~]$ pwd
/home/nttrang
[nttrang@nttrangN05 ~]$ mkdir TaiLieu
[nttrang@nttrangN05 ~]$ cd TaiLieu/
[nttrang@nttrangN05 TaiLieu]$ cat > baitap.txt
This is my file
UTC
Welcome
[nttrang@nttrangN05 TaiLieu]$ cat baitap.txt
This is my file
UTC
Welcome
[nttrang@nttrangN05 TaiLieu]$ cat >> baitap.txt
I am Ha Noi
[nttrang@nttrangN05 TaiLieu]$ cat baitap.txt
This is my file
UTC
Welcome
I am Ha Noi
[nttrang@nttrangN05 TaiLieu]$
```

```
[nttrang@nttrangN05 TaiLieu]$ cd
[nttrang@nttrangN05 ~]$ pwd
/home/nttrang
[nttrang@nttrangN05 ~]$ ls -l
total 0
drwxr-xr-x. 2 nttrang thaibinh 24 Mar 16 23:44 TaiLieu
[nttrang@nttrangN05 ~]$ chmod g+w,o-r TaiLieu/
[nttrang@nttrangN05 ~]$ ls -l
total 0
drwxrwx--x. 2 nttrang thaibinh 24 Mar 16 23:44 TaiLieu
[nttrang@nttrangN05 ~]$ chmod g+rw-x,o+r-wr TaiLieu/baitap.txt
[nttrang@nttrangN05 ~]$ tail -2 TaiLieu/baitap.txt
Welcome
I am Ha Noi
```

```
[nttrang@nttrangN05 ~]$ vi TaiLieu/baitap.txt
[nttrang@nttrangN05 ~]$ tail -2 TaiLieu/baitap.txt
UTC
This file has been modified!
```

```
[opensource@nttrangN05 ~]$ cd /home/nttrang/TaiLieu
[opensource@nttrangN05 TaiLieu]$ vi baitap
[opensource@nttrangN05 TaiLieu]$ vi baitap.txt
[opensource@nttrangN05 TaiLieu]$ cat baitap.txt
This file has been modified by opensource!
[opensource@nttrangN05 TaiLieu]$ su - linux
Password:
[linux@nttrangN05 ~]$ cat /home/nttrang/TaiLieu/baitap.txt
cat: /home/nttrang/TaiLieu/baitap.txt: Permission denied
[linux@nttrangN05 ~]$ cat > /home/nttrang/TaiLieu/baitap.txt
-bash: /home/nttrang/TaiLieu/baitap.txt: Permission denied
[linux@nttrangN05 ~]$ date
Thu Mar 17 00:21:53 EDT 2022
[linux@nttrangN05 ~]$
```
