

(1) Directory Operation

Enter the following commands in sequence:

\$pwd

\$cd ~

\$mkdir your\_studentID

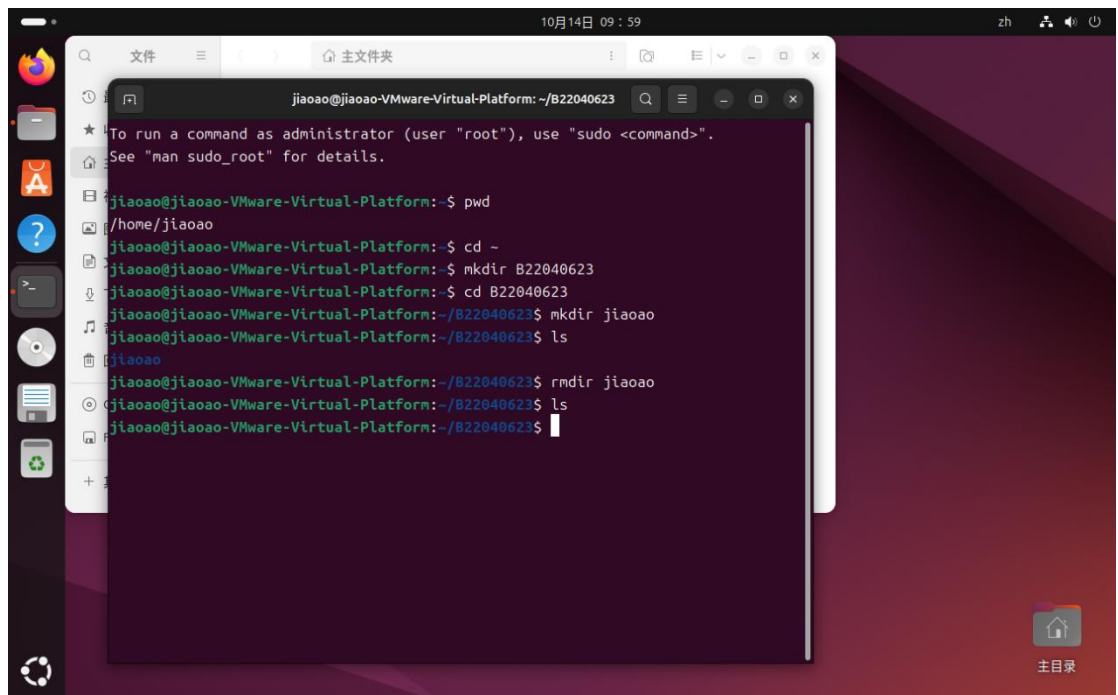
\$cd your\_studentID

\$mkdir your\_name

\$ls

\$rmdir your\_name

\$ls



(2) File operation

Enter the following commands in sequence:

\$cd ~

\$touch yourname.txt

\$ls

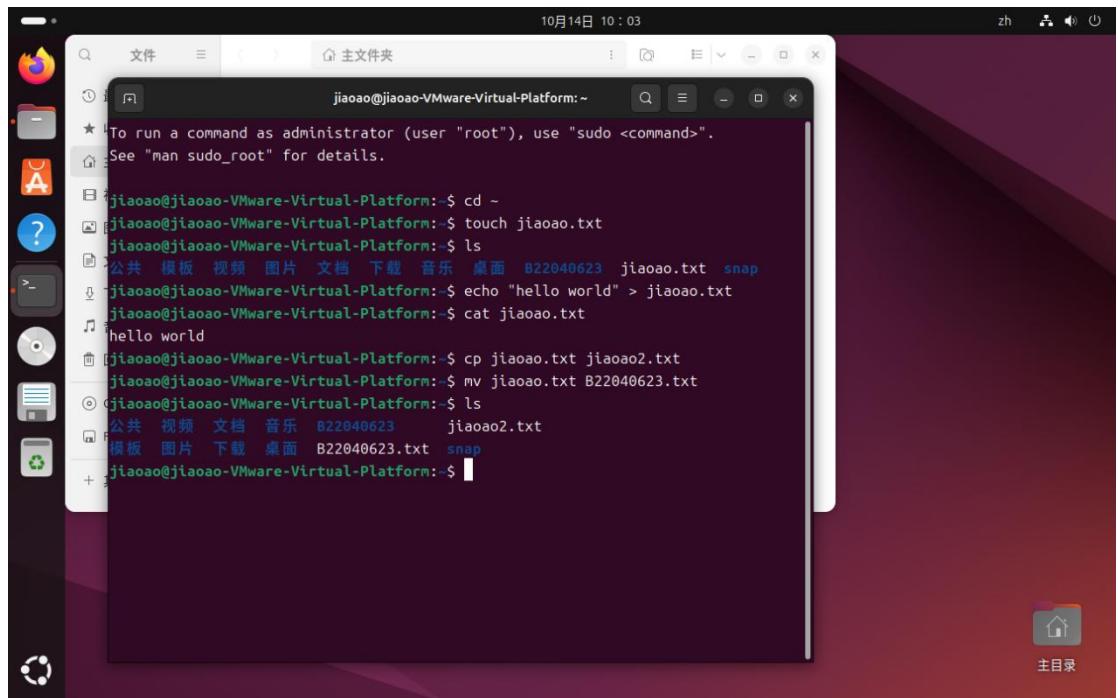
\$echo "hello world" > yourname.txt

\$cat yourname.txt

\$cp yourname.txt yourname2.txt

\$mv yourname.txt yourstudentid.txt

\$ls



### (3) User Management

Enter the following commands in sequence:

```
$whoami
```

```
$sudo su root
```

Enter the password of the current logged-in user, not the root password, and then enter:

```
#groupadd student
```

```
#whoami
```

```
#adduser yourstudentID
```

```
#usermod -g student yourstudentID
```

Follow the prompts to create the user and add the user to the student group.

Switch to the user.

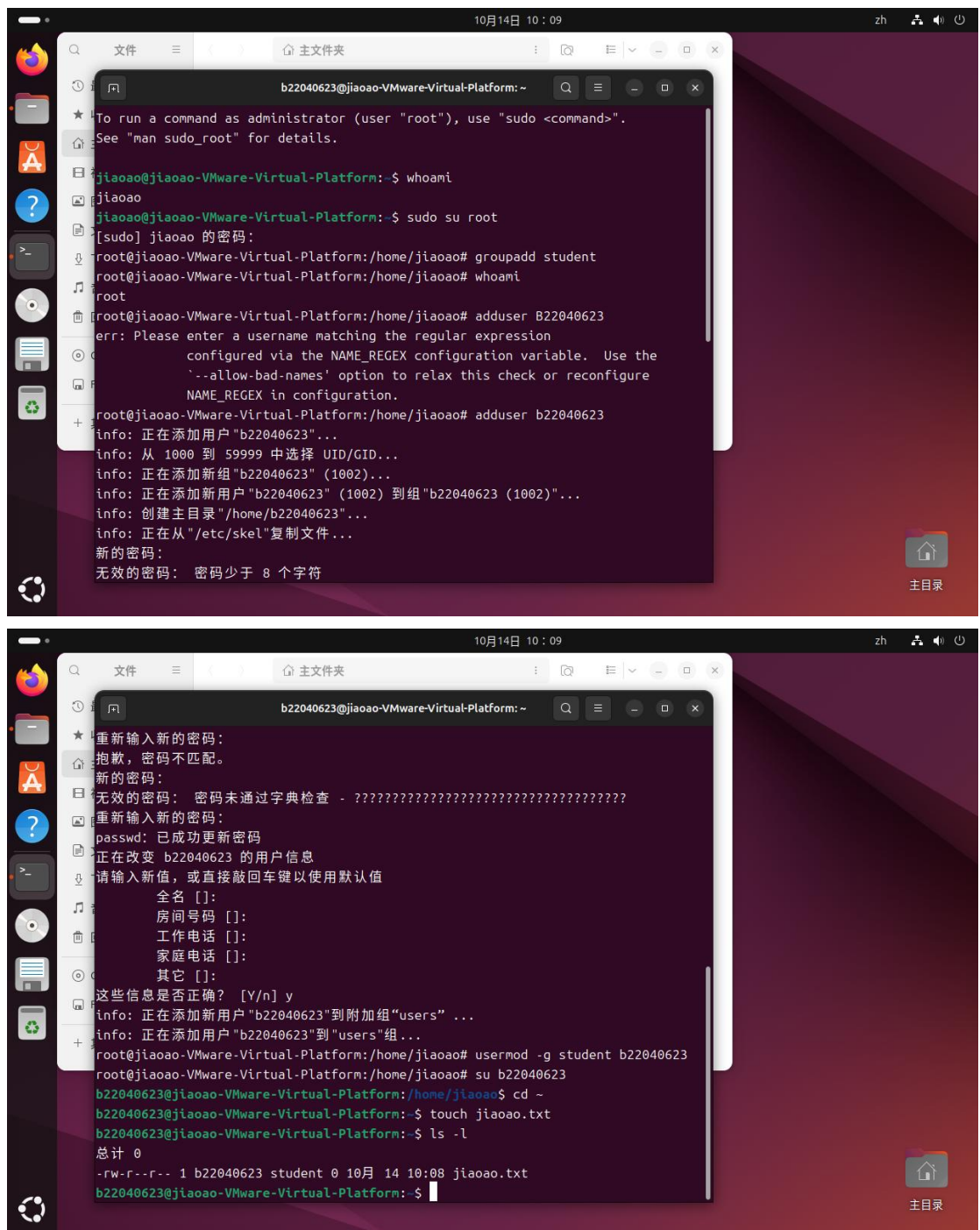
```
#su yourstudentID
```

```
$cd ~
```

```
$touch yourname.txt
```

```
$ls -l
```

View the properties of the file, including the owner user and the group to which the owner user belongs.



#### (4) Permission management

Enter the following commands in sequence:

```
$ touch demo
```

```
$ chmod 777 demo
```

```
$ chmod a-x demo
```

```
$ chmod go-w demo
```

```
$ chmod g+w demo
```

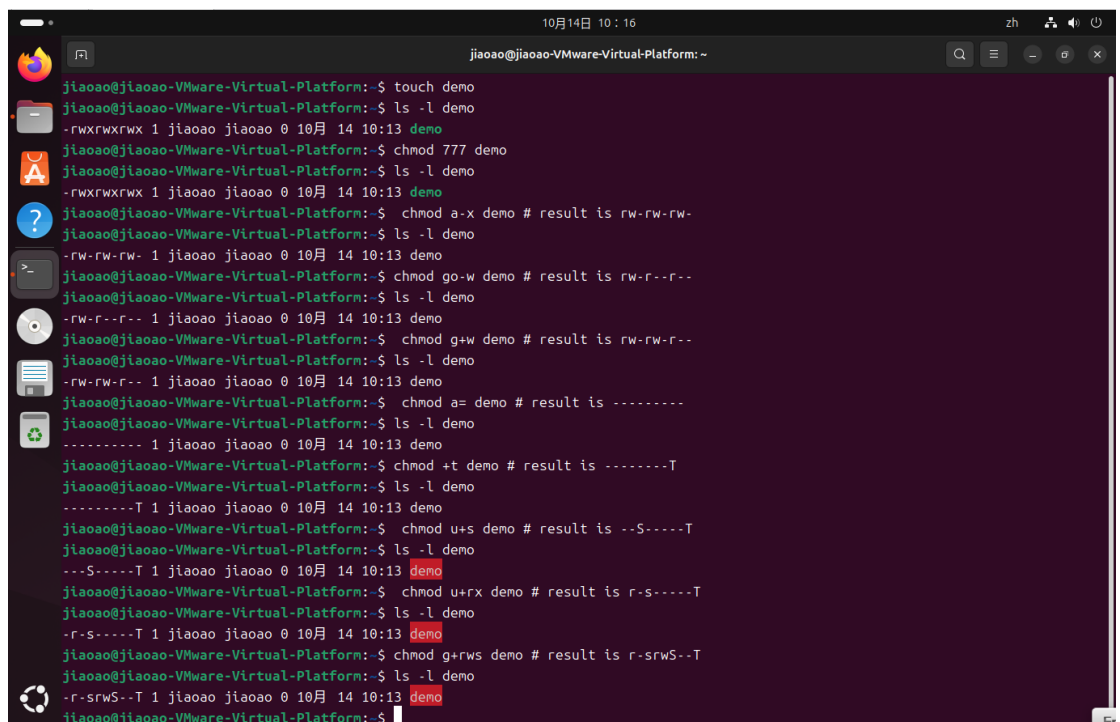
```
$ chmod a= demo
```

```

$ chmod +t demo
$ chmod u+s demo
$ chmod u+rx demo
# result is rw-rw-rw-
# result is rw-r--r--
# result is rw-rw-r--
# result is -----
# result is -----T
# result is --S-----T
# result is r-s-----T
$ chmod g+rws demo
# result is r-srws--T

```

After entering each line, run `ls -l demo` to view the result.



```

10月14日 10:16
jiaobao@jiaobao-VMware-Virtual-Platform: ~
jiaobao@jiaobao-VMware-Virtual-Platform:~$ touch demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-rwxrwxrwx 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod 777 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-rwxrwxrwx 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod a-x demo # result is rw-rw-rw-
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-rw-rw-rw- 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod go-w demo # result is rw-r--r--
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-rw-r--r-- 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod g+w demo # result is rw-rw-r--
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-rw-rw-r-- 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod a= demo # result is -----
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
----- 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod +t demo # result is -----T
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
-----T 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod u+s demo # result is --S-----T
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
--S-----T 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod u+rx demo # result is r-s-----T
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
r-s-----T 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$ chmod g+rws demo # result is r-srws--T
jiaobao@jiaobao-VMware-Virtual-Platform:~$ ls -l demo
r-srws--T 1 jiaobao jiaobao 0 10月 14 10:13 demo
jiaobao@jiaobao-VMware-Virtual-Platform:~$

```

### ###(5) Other management

Create folder "others" in the main directory of the user, go to the folder, and create two files with the name of any file. Then run the following commands in sequence.

```

$tar -czvf backup.tar.gz others
$ls -l
$tar -xzvf backup.tar.gz
$ls -l Observe changes in the process.

```

Create a textfile file and make it as follows:

no, I study in njupt.

this line ends with 00

this line ends with .00

I am 25 years old.

He is 15.

It is 16.00 wy is the short of my name.

Search for all lines beginning with the character "n" in the file textfile

\$ grep '^n' textfile

Search the textfile for all lines ending in ".00"

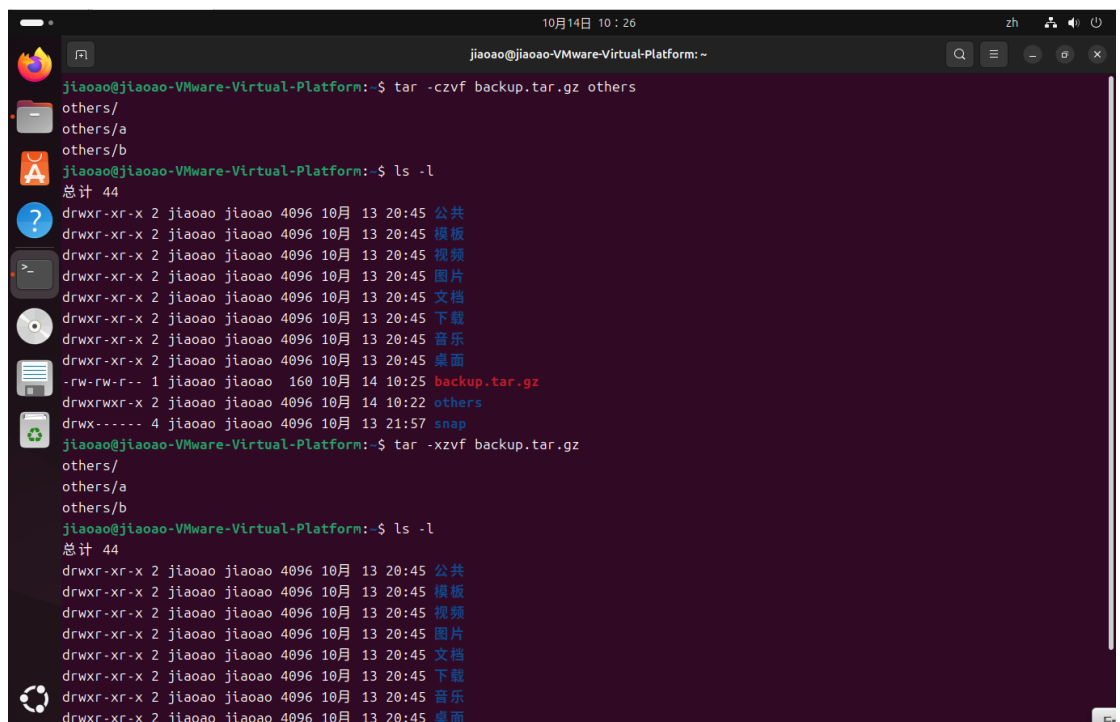
\$ grep '\.00\$' textfile

Search for all lines in the textfile that contain the number 5, followed by the character ".", followed by any character

\$ grep '5\.' textfile

Search for all lines starting with the characters "w" and "y" in the file textfile

\$ grep '^[wy]'textfile



The screenshot shows a terminal window titled "jiaobao@jiaobao-VMware-Virtual-Platform: ~" with a dark background. The user has executed several commands:   
1. `tar -czvf backup.tar.gz others` to create a backup of the 'others' directory.   
2. `ls -l` to list the contents of the current directory.   
3. `tar -xzf backup.tar.gz` to extract the backup.   
4. `ls -l` again to verify the extracted files.   
The terminal output shows the directory structure of 'others' before and after the backup/extract process. The files listed include '公共', '模板', '视频', '图片', '文档', '下载', '音乐', and '桌面'. The file permissions and ownership are also displayed for each file.

