（1）Directory Operation

Enter the following commands in sequence:
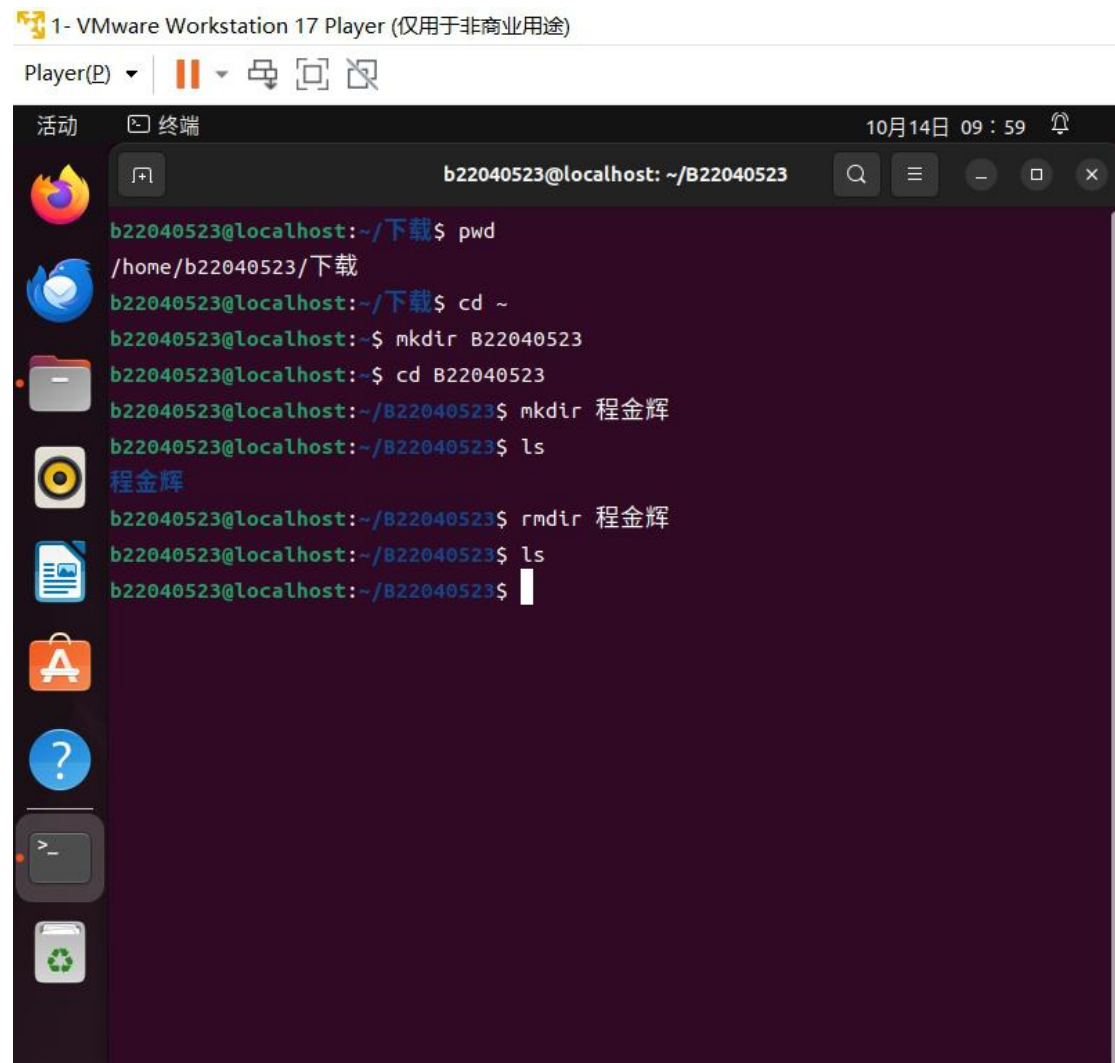
```
$pwd
$cd ~
$mkdir your_studentID
$cd your_studentID
$mkdir your_name
$ls
$rmdir your_name
$ls
```

Save a screenshot of the above command along with the corresponding results, you must have your student number and name.
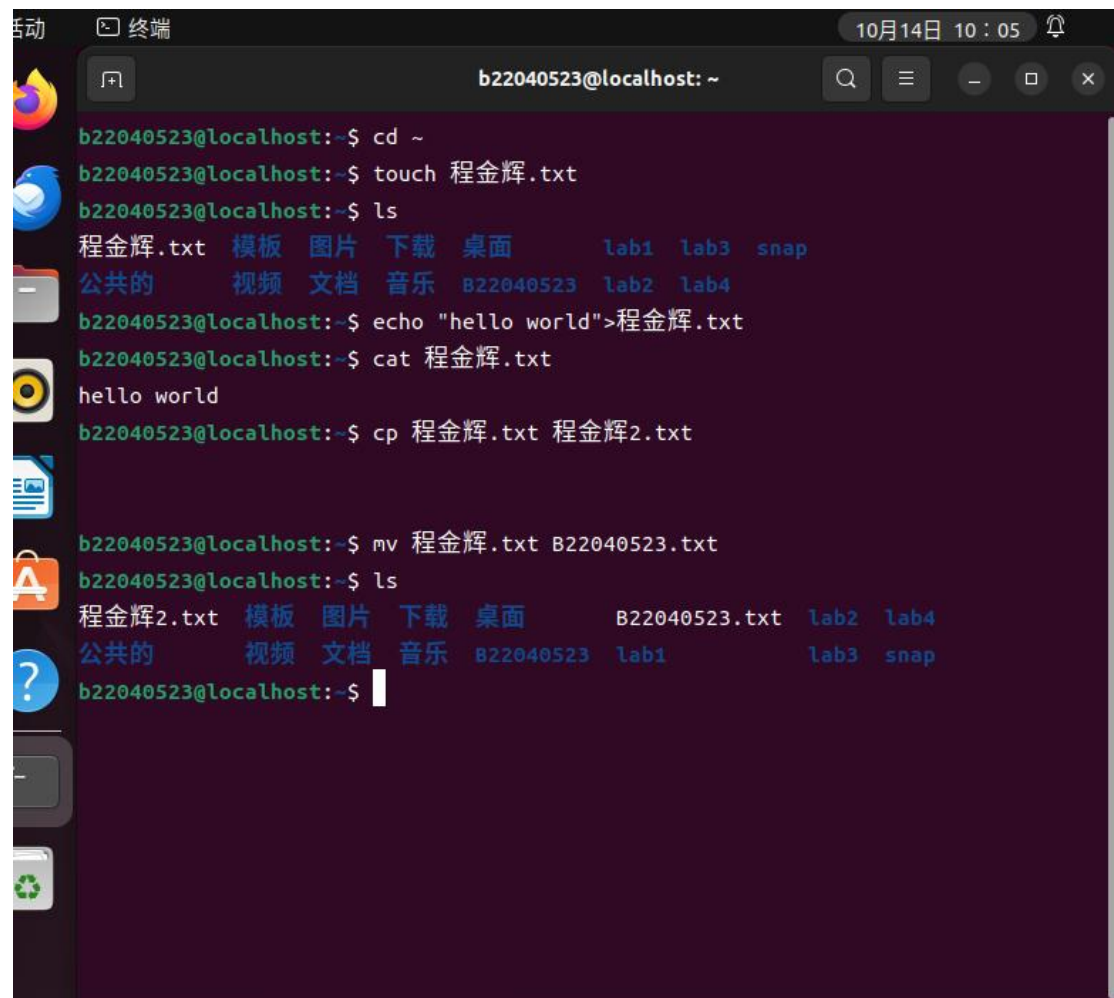
结果：

(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
```

Save a screenshot of the above command along with the corresponding results, you must have your student number and name.

结果：

(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.
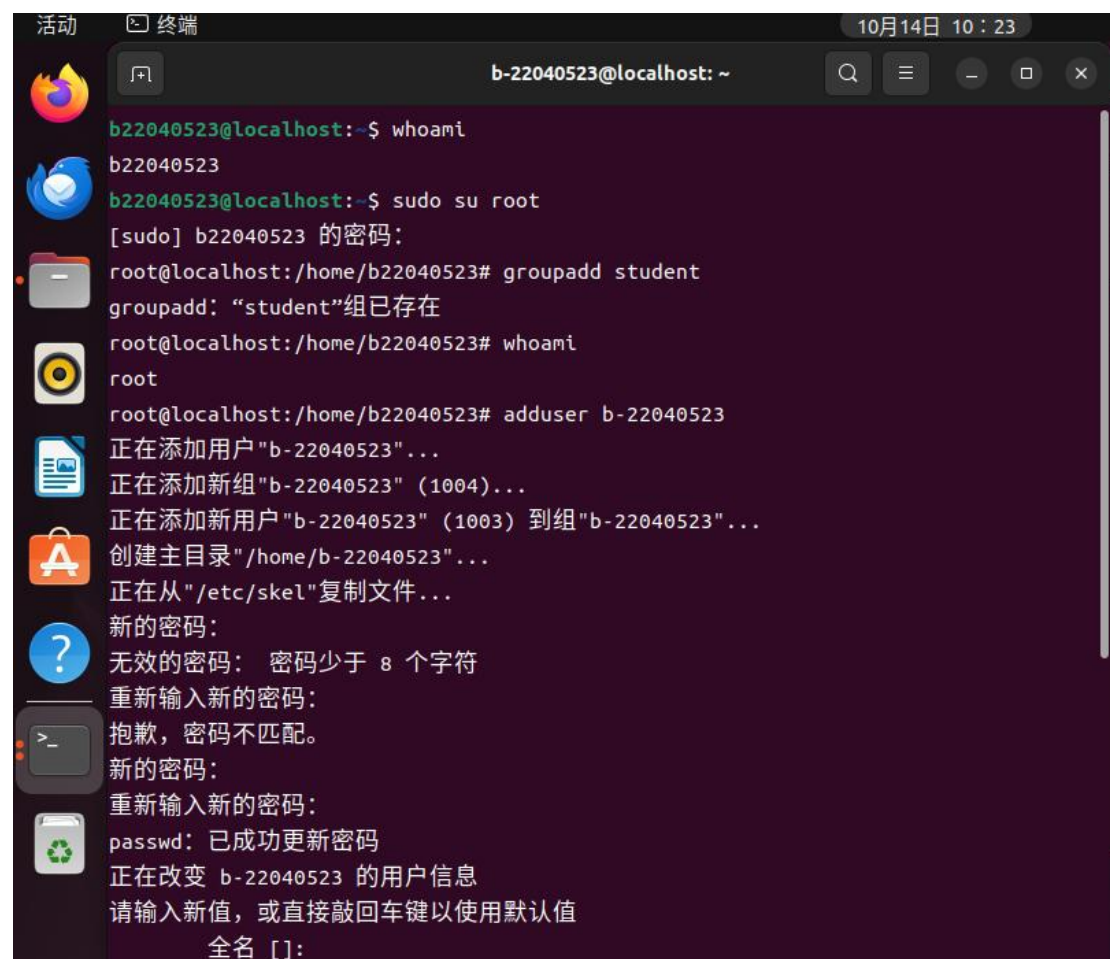
Switch to the user.
```
#su yourstudentID
$cd ~
$touch yourname.txt
$ls -l
```
View the properties of the file, including the owner user and the group to which the owner user belongs.
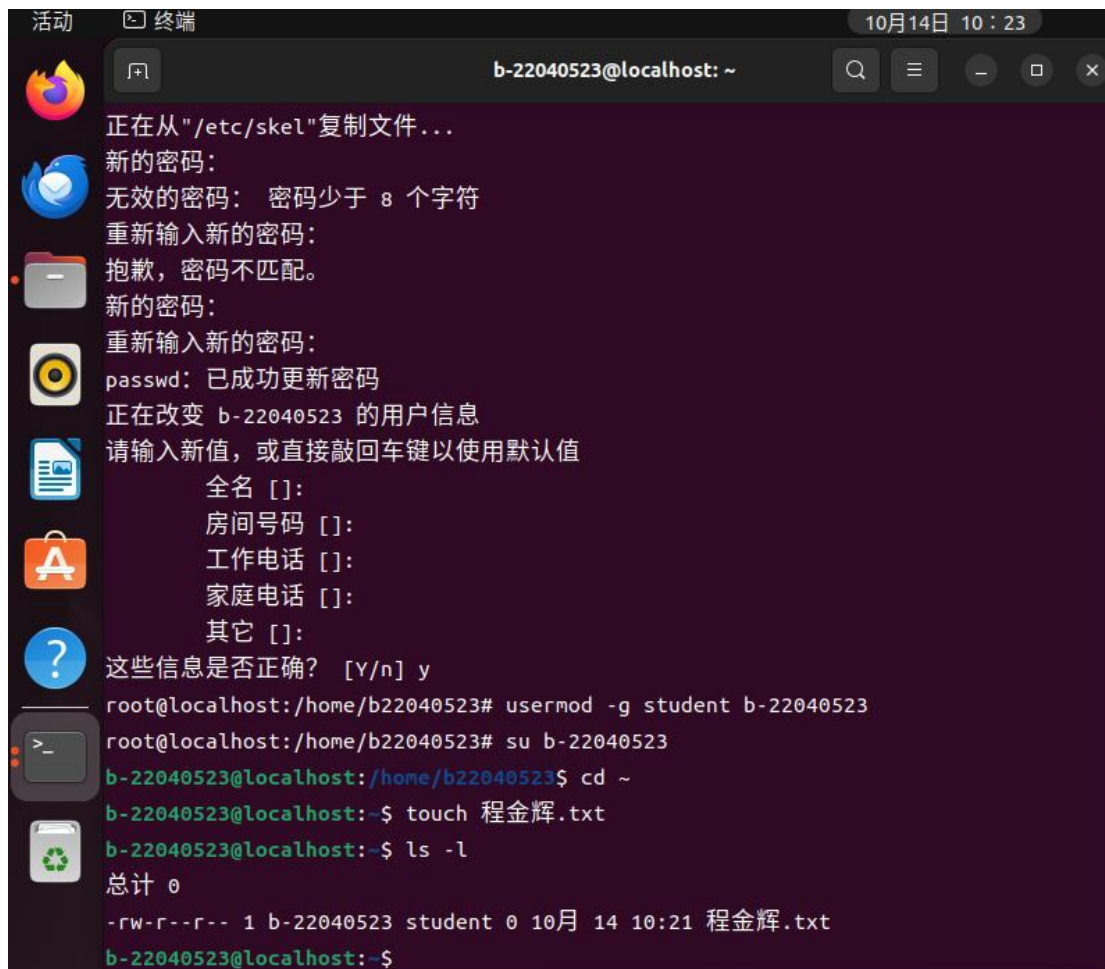
结果：

(4) Permission management

Enter the following commands in sequence:

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

###(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.

```
$whoami
$sudo su root
#groupadd student
#whoami
#adduser yourstudentID
#usermod -g student yourstudentID
#su yourstudentID
$cd ~
$touch yourname.txt
$ls -l
$ touch demo
$ chmod 777 demo
$ chmod a-x demo # result is rw-rw-rw-
```

```
$ chmod go-w demo # result is rw-r--r--
$ chmod g+w demo # result is rw-rw-r--
$ chmod a= demo # result is ---------
$ chmod +t demo # result is --------T
$ chmod u+s demo # result is --S-----T
$ chmod u+rx demo # result is r-s-----T
$ chmod g+rws demo # result is r-srwS--T
$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
```

结果：

```
b22040523@localhost:~$ touch demo
b22040523@localhost:~$ ls -l demo
-rw-rw-r-- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod 777 demo
b22040523@localhost:~$ ls-l demo
ls-l: 未找到命令
b22040523@localhost:~$ ls -l demo
-rwxrwxrwx 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod a-x demo
b22040523@localhost:~$ ls -l demo
-rw-rw-rw- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod go-w demo
b22040523@localhost:~$ ls -l demo
-rw-r--r-- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod g+w demo
b22040523@localhost:~$ ls -l demo
-rw-rw-r-- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod a= demo
b22040523@localhost:~$ ls -l demo
---------- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$  chmod +t demo
b22040523@localhost:~$ ls -l demo
---------T 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod u+s demo
```

```
b22040523@localhost:~$ ls -l demo
-rw-rw-rw- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod go-w demo
b22040523@localhost:~$ ls -l demo
-rw-r--r-- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod g+w demo
b22040523@localhost:~$ ls -l demo
-rw-rw-r-- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod a= demo
b22040523@localhost:~$ ls -l demo
---------- 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$  chmod +t demo
b22040523@localhost:~$ ls -l demo
---------T 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod u+s demo
b22040523@localhost:~$ ls -l demo
---S-----T 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod u+rx demo
b22040523@localhost:~$ ls -l demo
-r-s-----T 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$ chmod g+rws demo
b22040523@localhost:~$ ls -l demo
-r-srwS--T 1 b22040523 b22040523 0 10月 14 10:29 demo
b22040523@localhost:~$
```

```
b22040523@localhost:~$ tar -czvf backup.tar.gz others
others/
others/1/
others/2/
b22040523@localhost:~$ ls -l
总计 72
-rw-rw-r-- 1 b22040523 b22040523   12 10月 14 10:04 程金辉2.txt
drwxr-xr-x 3 b22040523 b22040523 4096 4月   6  2024 公共的
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 模板
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 视频
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 图片
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 文档
drwxr-xr-x 5 b22040523 b22040523 4096 10月 12 11:18 下载
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 音乐
drwxr-xr-x 2 b22040523 b22040523 4096 4月   6  2024 桌面
drwxrwxr-x 2 b22040523 b22040523 4096 10月 14 09:56 B22040523
-rw-rw-r-- 1 b22040523 b22040523   12 10月 14 10:03 B22040523.txt
-rw-rw-r-- 1 b22040523 b22040523  148 10月 14 10:38 backup.tar.gz
-r-srwS--T 1 b22040523 b22040523    0 10月 14 10:29 demo
drwxrwxr-x 2 b22040523 b22040523 4096 4月   7  2024 lab1
drwxrwxr-x 2 b22040523 b22040523 4096 6月  18 10:48 lab2
drwxrwxr-x 2 b22040523 b22040523 4096 6月  18 10:56 lab3
drwxrwxr-x 2 b22040523 b22040523 4096 6月  18 11:01 lab4
drwxrwxr-x 4 b22040523 b22040523 4096 10月 14 10:36 others
```

```
others/1/
others/2/
b22040523@localhost:~$ ls -l
总计 72
-rw-rw-r-- 1 b22040523 b22040523   12 10月  14 10:04 程金辉2.txt
drwxr-xr-x 3 b22040523 b22040523 4096  4月   6  2024 公共的
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 模板
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 视频
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 图片
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 文档
drwxr-xr-x 5 b22040523 b22040523 4096 10月  12 11:18 下载
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 音乐
drwxr-xr-x 2 b22040523 b22040523 4096  4月   6  2024 桌面
drwxrwxr-x 2 b22040523 b22040523 4096 10月  14 09:56 B22040523
-rw-rw-r-- 1 b22040523 b22040523   12 10月  14 10:03 B22040523.txt
-rw-rw-r-- 1 b22040523 b22040523  148 10月  14 10:38 backup.tar.gz
-r-srwS--T 1 b22040523 b22040523    0 10月  14 10:29 demo
drwxrwxr-x 2 b22040523 b22040523 4096  4月   7  2024 lab1
drwxrwxr-x 2 b22040523 b22040523 4096  6月  18 10:48 lab2
drwxrwxr-x 2 b22040523 b22040523 4096  6月  18 10:56 lab3
drwxrwxr-x 2 b22040523 b22040523 4096  6月  18 11:01 lab4
drwxrwxr-x 4 b22040523 b22040523 4096 10月  14 10:36 others
drwx------ 4 b22040523 b22040523 4096  4月   6  2024 snap
b22040523@localhost:~$ touch textfile
```

```
b22040523@localhost:~$ grep '^n' textfile
no, I study in njupt.
b22040523@localhost:~$ grep '\.00$' textfile
this line ends with .00
b22040523@localhost:~$ grep '5\..' textfile
He is 15. It is 16.00
b22040523@localhost:~$ grep '^[wy]' textfile
wy is the short of my name.
b22040523@localhost:~$
```

```
drwx------  4 b22040523 b22040523 4096  4月   6  2024 snap
b22040523@localhost:~$ tar -xzvf backup.tar.gz
others/
others/1/
others/2/
b22040523@localhost:~$ ls -l
总计 72
-rw-rw-r--  1 b22040523 b22040523   12 10月  14 10:04 程金辉2.txt
drwxr-xr-x  3 b22040523 b22040523 4096  4月   6  2024 公共的
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 模板
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 视频
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 图片
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 文档
drwxr-xr-x  5 b22040523 b22040523 4096 10月  12 11:18 下载
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 音乐
drwxr-xr-x  2 b22040523 b22040523 4096  4月   6  2024 桌面
drwxrwxr-x  2 b22040523 b22040523 4096 10月  14 09:56 B22040523
-rw-rw-r--  1 b22040523 b22040523   12 10月  14 10:03 B22040523.txt
-rw-rw-r--  1 b22040523 b22040523  148 10月  14 10:38 backup.tar.gz
-r-srwS--T  1 b22040523 b22040523    0 10月  14 10:29 demo
drwxrwxr-x  2 b22040523 b22040523 4096  4月   7  2024 lab1
drwxrwxr-x  2 b22040523 b22040523 4096  6月  18 10:48 lab2
drwxrwxr-x  2 b22040523 b22040523 4096  6月  18 10:56 lab3
drwxrwxr-x  2 b22040523 b22040523 4096  6月  18 11:01 lab4
```