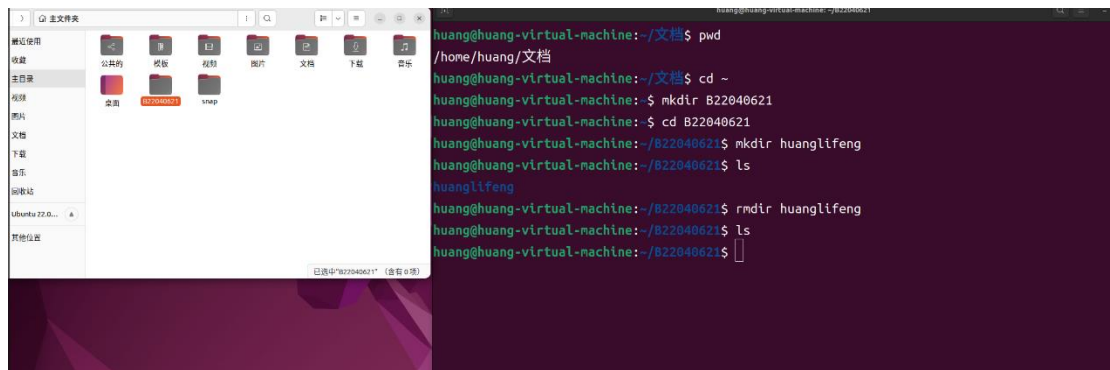


Enter the following commands in sequence:

```
$pwd
$cd ~
$mkdir your_studentID
$cd your_studentID
$mkdir your_name
$ls
$rmkdir your_name
$ls
```

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



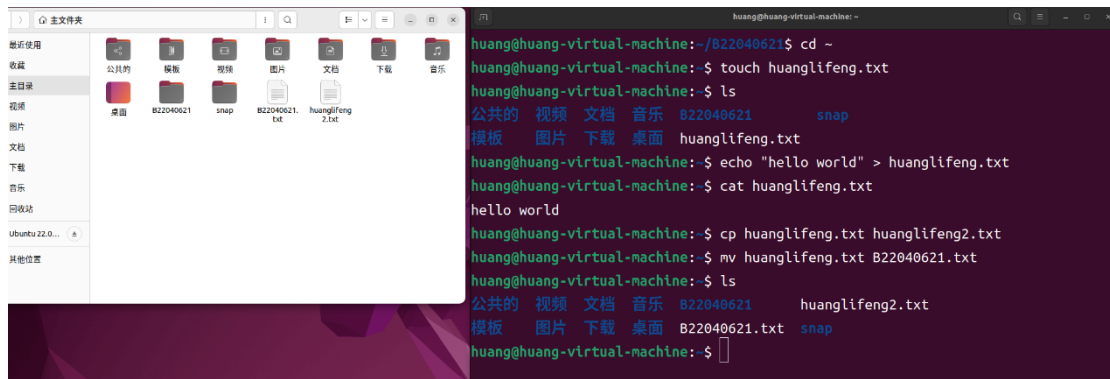
实验 1-1

(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.



实验 1-2

(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.

```
huang@huang-virtual-machine:~/B22040621$ whoami
huang
huang@huang-virtual-machine:~/B22040621$ sudo su root
[sudo] huang 的密码:
root@huang-virtual-machine:/home/huang/B22040621# groupadd student
root@huang-virtual-machine:/home/huang/B22040621# whoami
root
```

```

root@huang-virtual-machine:/home/huang/B22040621# adduser b22040621
正在添加用户 "b22040621"...
正在添加新组 "b22040621" (1002)...
正在添加新用户 "b22040621" (1001) 到组 "b22040621"...
创建主目录 "/home/b22040621"...
正在从 "/etc/skel" 复制文件...
新的密码:
无效的密码: 密码未通过字典检查 - ???????????/?????????
重新输入新的密码:
抱歉, 密码不匹配。
新的密码:
重新输入新的密码:
passwd: 已成功更新密码
正在改变 b22040621 的用户信息
请输入新值, 或直接敲回车键以使用默认值
    全名 []:
    房间号码 []:
    工作电话 []:
    家庭电话 []:
    其它 []:
这些信息是否正确? [Y/n] Y
root@huang-virtual-machine:/home/huang/B22040621# usermod -g student b22040621
root@huang-virtual-machine:/home/huang/B22040621# su b22040621
b22040621@huang-virtual-machine:/home/huang/B22040621$ cd ~
b22040621@huang-virtual-machine:~$ touch B22040621.txt
b22040621@huang-virtual-machine:~$ ls -l

```

总计 0

```
-rw-r--r-- 1 b22040621 student 0 10月 14 10:18 B22040621.txt
```

实验 1-3

(4) Permission management

Enter the following commands in sequence:

```

$ 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

```

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

```

huang@huang-virtual-machine:~/B22040621$ touch demo
huang@huang-virtual-machine:~/B22040621$ chmod 777 demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-rwxrwxrwx 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod a-x demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-rw-rw-rw- 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod go-w demo
huang@huang-virtual-machine:~/B22040621$ ls -l
ls-l: 未找到命令
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-rw-r--r-- 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod g+w demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-rw-rw-r-- 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod a= demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
----- 1 huang huang 0 10月 14 10:23 demo

```

```

huang@huang-virtual-machine:~/B22040621$ chmod +t demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-----T 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod u+s demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
---S-----T 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod u+rx demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-r-s-----T 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$ chmod g+rws demo
huang@huang-virtual-machine:~/B22040621$ ls -l
总计 0
-r-srws--T 1 huang huang 0 10月 14 10:23 demo
huang@huang-virtual-machine:~/B22040621$

```

实验 1-4

###(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.
```

```
huang@huang-virtual-machine:~$ tar -czvf backup.tar.gz others
others/
others/aa.txt
others/bb.txt
huang@huang-virtual-machine:~$ ls -l
总计 56
drwxr-xr-x 2 huang huang 4096 4月 1 2024 公共的
drwxr-xr-x 2 huang huang 4096 4月 1 2024 模板
drwxr-xr-x 2 huang huang 4096 4月 1 2024 视频
drwxr-xr-x 2 huang huang 4096 4月 1 2024 图片
drwxr-xr-x 2 huang huang 4096 4月 6 2024 文档
drwxr-xr-x 4 huang huang 4096 10月 12 11:21 下载
drwxr-xr-x 2 huang huang 4096 4月 1 2024 音乐
drwxr-xr-x 2 huang huang 4096 10月 12 09:39 桌面
drwxrwxr-x 2 huang huang 4096 10月 14 10:23 B22040621
-rw-rw-r-- 1 huang huang 12 10月 14 10:02 B22040621.txt
-rw-rw-r-- 1 huang huang 161 10月 14 10:38 backup.tar.gz
-rw-rw-r-- 1 huang huang 12 10月 14 10:03 huanglifeng2.txt
drwxrwxr-x 2 huang huang 4096 10月 14 10:37 others
drwx----- 4 huang huang 4096 4月 1 2024 snap
huang@huang-virtual-machine:~$ tar -xzvf backup.tar.gz
others/
others/aa.txt
others/bb.txt
```

```
uang@huang-virtual-machine:~$ ls -l
总计 56
-rwxr-xr-x 2 huang huang 4096 4月 1 2024 公共的
-rwxr-xr-x 2 huang huang 4096 4月 1 2024 模板
-rwxr-xr-x 2 huang huang 4096 4月 1 2024 视频
-rwxr-xr-x 2 huang huang 4096 4月 1 2024 图片
-rwxr-xr-x 2 huang huang 4096 4月 6 2024 文档
-rwxr-xr-x 4 huang huang 4096 10月 12 11:21 下载
-rwxr-xr-x 2 huang huang 4096 4月 1 2024 音乐
-rwxr-xr-x 2 huang huang 4096 10月 12 09:39 桌面
-rwxrwxr-x 2 huang huang 4096 10月 14 10:23 B22040621
-rw-rw-r-- 1 huang huang 12 10月 14 10:02 B22040621.txt
-rw-rw-r-- 1 huang huang 161 10月 14 10:38 backup.tar.gz
-rw-rw-r-- 1 huang huang 12 10月 14 10:03 huanglifeng2.txt
-rwxrwxr-x 2 huang huang 4096 10月 14 10:37 others
-rwx----- 4 huang huang 4096 4月 1 2024 snap
```

实验 1-5