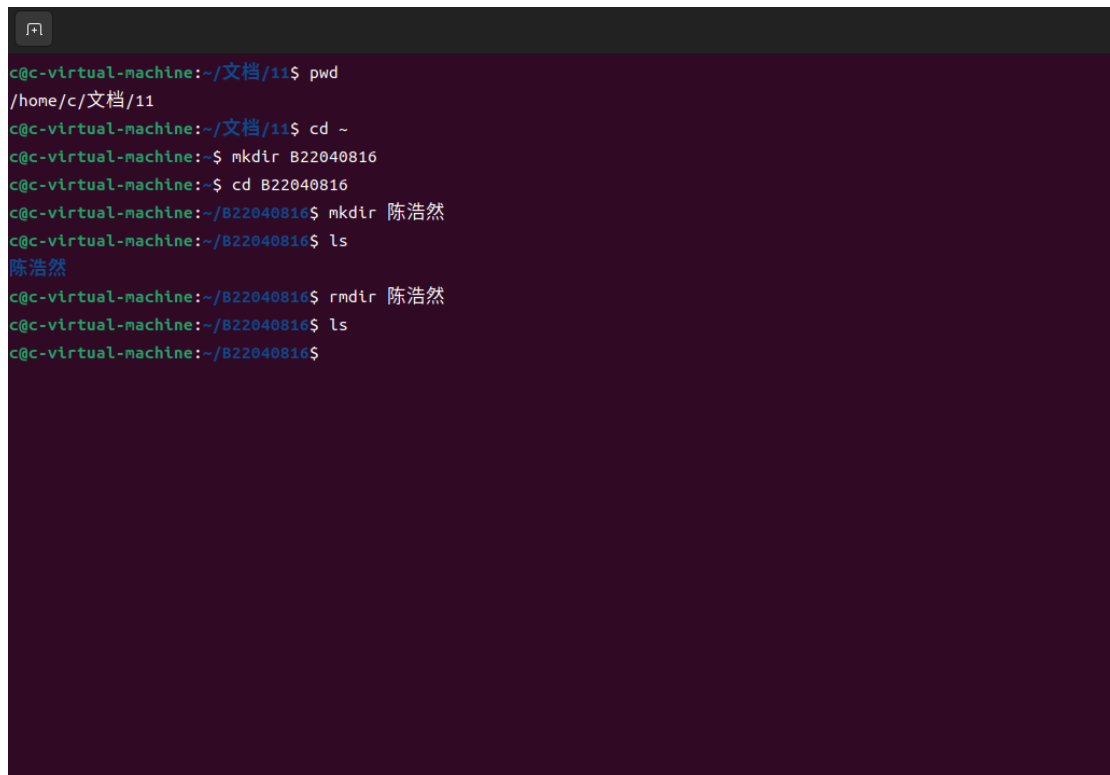


### (1) Directory Operation

Enter the following commands in sequence:

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

A terminal window with a dark purple background and light green text. The prompt is 'c@c-virtual-machine:~/文档/11\$'. The user enters 'pwd', and the output is '/home/c/文档/11'. Then the user enters 'cd ~', and the prompt changes to 'c@c-virtual-machine:~/文档/11\$'. Next, the user enters 'mkdir B22040816', and the prompt changes to 'c@c-virtual-machine:~\$'. Then the user enters 'cd B22040816', and the prompt changes to 'c@c-virtual-machine:~/B22040816\$'. Next, the user enters 'mkdir 陈浩然', and the prompt changes to 'c@c-virtual-machine:~/B22040816\$'. Then the user enters 'ls', and the output is '陈浩然'. Next, the user enters 'rmdir 陈浩然', and the prompt changes to 'c@c-virtual-machine:~/B22040816\$'. Then the user enters 'ls', and the output is empty. Finally, the user enters '\$', and the prompt changes to 'c@c-virtual-machine:~/B22040816\$'.

### (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
```

```
c@c-virtual-machine: ~  
c@c-virtual-machine:~/文档/11$ cd ~  
c@c-virtual-machine:~$ touch 陈浩然.txt  
c@c-virtual-machine:~$ ls  
陈浩然.txt 公共的 模板 视频 图片 文档 下载 音乐 桌面 B22040816 snap  
c@c-virtual-machine:~$ echo "hello world" > 陈浩然.txt  
c@c-virtual-machine:~$ cat 陈浩然.txt  
hello world  
c@c-virtual-machine:~$ cp 陈浩然.txt 陈浩然2.txt  
c@c-virtual-machine:~$ mv 陈浩然.txt B22040816.txt  
c@c-virtual-machine:~$ ls  
陈浩然2.txt 模板 图片 下载 桌面 B22040816.txt  
公共的 视频 文档 音乐 B22040816 snap  
c@c-virtual-machine:~$
```

### (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
```

```
b22040816@c-virtual-machine: ~  
b22040816@c-virtual-machine:~/桌面$ whoami  
c  
b22040816@c-virtual-machine:~/桌面$ sudo su root  
[sudo] password for c:  
root@c-virtual-machine:/home/c/桌面# groupadd student  
groupadd: group 'student' already exists  
root@c-virtual-machine:/home/c/桌面# whoami  
root  
root@c-virtual-machine:/home/c/桌面# adduser B22040816  
adduser: Please enter a username matching the regular expression configured  
via the NAME_REGEX[SYSTEM] configuration variable. Use the '--force-badname'  
option to relax this check or reconfigure NAME_REGEX.  
root@c-virtual-machine:/home/c/桌面# adduser b22040816  
adding user 'b22040816' ...  
adding new group 'b22040816' (1002) ...  
adding new user 'b22040816' (1001) with group 'b22040816' ...  
creating home directory '/home/b22040816' ...  
copying files from '/etc/skel' ...  
new password:  
BAD PASSWORD: The password is shorter than 8 characters  
retype new password:  
sorry, passwords do not match.  
new password:  
BAD PASSWORD: The password is shorter than 8 characters  
retype new password:  
passwd: password updated successfully  
changing the user information for b22040816  
Enter the new value, or press ENTER for the default  
Full Name []: b22040816  
Room Number []: 1001  
Work Phone []:  
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y  
root@c-virtual-machine:/home/c/桌面# su B22040816  
su: user B22040816 does not exist or the user entry does not contain all the required fields  
root@c-virtual-machine:/home/c/桌面# su b22040816  
b22040816@c-virtual-machine:/home/c/桌面$ cd -  
b22040816@c-virtual-machine: $ touch 陈浩然.txt  
b22040816@c-virtual-machine: $ ls -l  
陈浩然.txt  
b22040816@c-virtual-machine: $
```

#### (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
```

```
c@c-virtual-machine: ~/文档/11
c@c-virtual-machine:~/文档/11$ touch demo
c@c-virtual-machine:~/文档/11$ chmod 777 demo
c@c-virtual-machine:~/文档/11$ chmod a-x demo
c@c-virtual-machine:~/文档/11$ chmod go-w demo
c@c-virtual-machine:~/文档/11$ chmod g+w demo
c@c-virtual-machine:~/文档/11$ chmod a= demo
c@c-virtual-machine:~/文档/11$ chmod +t demo
c@c-virtual-machine:~/文档/11$ chmod +t demo
c@c-virtual-machine:~/文档/11$ chmod u+s demo
c@c-virtual-machine:~/文档/11$ chmod u+rx demo
c@c-virtual-machine:~/文档/11$ chmod g+rws demo
c@c-virtual-machine:~/文档/11$ ls -l demo
-r-srws--T 1 c c 0 10月 14 10:39 demo
c@c-virtual-machine:~/文档/11$
```