

(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.

```
godzz@godzz-virtual-machine:~$ pwd
/home/godzz
godzz@godzz-virtual-machine:~$ cd ~
godzz@godzz-virtual-machine:~$ mkdir B22040819
godzz@godzz-virtual-machine:~$ cd B22040819/
godzz@godzz-virtual-machine:~/B22040819$ mkdir zhuolihao
godzz@godzz-virtual-machine:~/B22040819$ ls
zhuolihao
godzz@godzz-virtual-machine:~/B22040819$ rmdir zhuolihao/
godzz@godzz-virtual-machine:~/B22040819$ ls
godzz@godzz-virtual-machine:~/B22040819$
```

(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.

```
godzz@godzz-virtual-machine:~/B22040819$ cd ~
godzz@godzz-virtual-machine:~$ touch zhuolihao.txt
godzz@godzz-virtual-machine:~$ ls
公共的 视频 文档 音乐 B22040819 zhuolihao.txt
模板 图片 下载 桌面 snap
godzz@godzz-virtual-machine:~$ echo "hello world" > zhuolihao.txt
godzz@godzz-virtual-machine:~$ cat zhuolihao.txt
hello world
godzz@godzz-virtual-machine:~$ cp zhuolihao.txt zhuolihao2.txt
godzz@godzz-virtual-machine:~$ mv zhuolihao.txt B22040819.txt
godzz@godzz-virtual-machine:~$ ls
公共的 视频 文档 音乐 B22040819 snap
模板 图片 下载 桌面 B22040819.txt zhuolihao2.txt
godzz@godzz-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
```

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

```
godzz@godzz-virtual-machine:~$ whoami  
godzz  
godzz@godzz-virtual-machine:~$ sudo su root  
[sudo] godzz 的密码:  
root@godzz-virtual-machine:/home/godzz# groupadd student  
groupadd: "student"组已存在  
root@godzz-virtual-machine:/home/godzz# whoami  
root  
root@godzz-virtual-machine:/home/godzz# adduser b22040819  
正在添加用户 "b22040819"...  
正在添加新组 "b22040819" (1002)...  
正在添加新用户 "b22040819" (1001) 到组 "b22040819"...  
创建主目录 "/home/b22040819"...  
正在从 "/etc/skel"复制文件...  
新的 密码:  
无效的密码: 密码少于 8 个字符  
重新输入新的 密码:  
抱歉, 密码不匹配。  
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:  
passwd: 已成功更新密码  
正在改变 b22040819 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]

```
root@godzz-virtual-machine:/home/godzz# usermod -g student b22040819
```

```
root@godzz-virtual-machine:/home/godzz# su b22040819
```

```
b22040819@godzz-virtual-machine:/home/godzz$ cd ~
```

```
b22040819@godzz-virtual-machine:~$ touch zhuolihao.txt
```

```
b22040819@godzz-virtual-machine:~$ ls -l
```

总计 0

```
-rw-r--r-- 1 b22040819 student 0 10月 14 09:59 zhuolihao.txt
```

```
b22040819@godzz-virtual-machine:~$
```

(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
```

```
b22040819@godzz-virtual-machine:~$ touch demo
b22040819@godzz-virtual-machine:~$ chmod 777 demo
b22040819@godzz-virtual-machine:~$ chmod a-x demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-rw-rw-rw- 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod go-w demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-rw-r--r-- 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod g+w demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-rw-rw-r-- 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod a= demo
b22040819@godzz-virtual-machine:~$ ls -l demo
----- 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod +t demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-----T 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod u+s demo
b22040819@godzz-virtual-machine:~$ ls -l demo
---S-----T 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod u+rx demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-r-s-----T 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$ chmod g+rws demo
b22040819@godzz-virtual-machine:~$ ls -l demo
-r-srws--T 1 b22040819 student 0 10月 14 10:03 demo
b22040819@godzz-virtual-machine:~$
```

###(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
```

```
b22040819@godzz-virtual-machine:~$ tar -xzvf backup.tar.gz
others/
others/file2
others/file1
others/backup.tar.gz
b22040819@godzz-virtual-machine:~$ ls -l
总计 8
-rw-r--r-- 1 b22040819 student 254 10月 14 10:10 backup.tar.gz
-r-srwS--T 1 b22040819 student 0 10月 14 10:03 demo
drwxr-xr-x 2 b22040819 student 4096 10月 14 10:10 others
-rw-r--r-- 1 b22040819 student 0 10月 14 09:59 zhuolihao.txt
b22040819@godzz-virtual-machine:~$
```

```
b22040819@godzz-virtual-machine:~$ mkdir others
b22040819@godzz-virtual-machine:~$ cd others/
b22040819@godzz-virtual-machine:~/others$ touch file1 file2
b22040819@godzz-virtual-machine:~/others$ tar -czvf backup.tar.gz others
tar: others: 无法 stat: 没有那个文件或目录
tar: 由于前次错误，将以上次的错误状态退出
b22040819@godzz-virtual-machine:~/others$ cd ..
b22040819@godzz-virtual-machine:~$ tar -czvf backup.tar.gz others
others/
others/file2
others/file1
others/backup.tar.gz
b22040819@godzz-virtual-machine:~$ ls -l
总计 8
-rw-r--r-- 1 b22040819 student 254 10月 14 10:10 backup.tar.gz
-r-srwS--T 1 b22040819 student 0 10月 14 10:03 demo
drwxr-xr-x 2 b22040819 student 4096 10月 14 10:10 others
-rw-r--r-- 1 b22040819 student 0 10月 14 09:59 zhuolihao.txt
```



```
GNU nano 7.2                                textfile.txt *
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.█
```

```
b22040819@godzz-virtual-machine:~$ touch textfile
b22040819@godzz-virtual-machine:~$ nano textfile
b22040819@godzz-virtual-machine:~$ grep '^n' textfile
no, I study in njupt.
b22040819@godzz-virtual-machine:~$ grep '\.00$' textfile
this line ends with .00
He is 15. It is 16.00
b22040819@godzz-virtual-machine:~$ grep '5\.' textfile
He is 15. It is 16.00
b22040819@godzz-virtual-machine:~$ grep '^[wy]' textfile
wy is the short of my name.█
b22040819@godzz-virtual-machine:~$
```