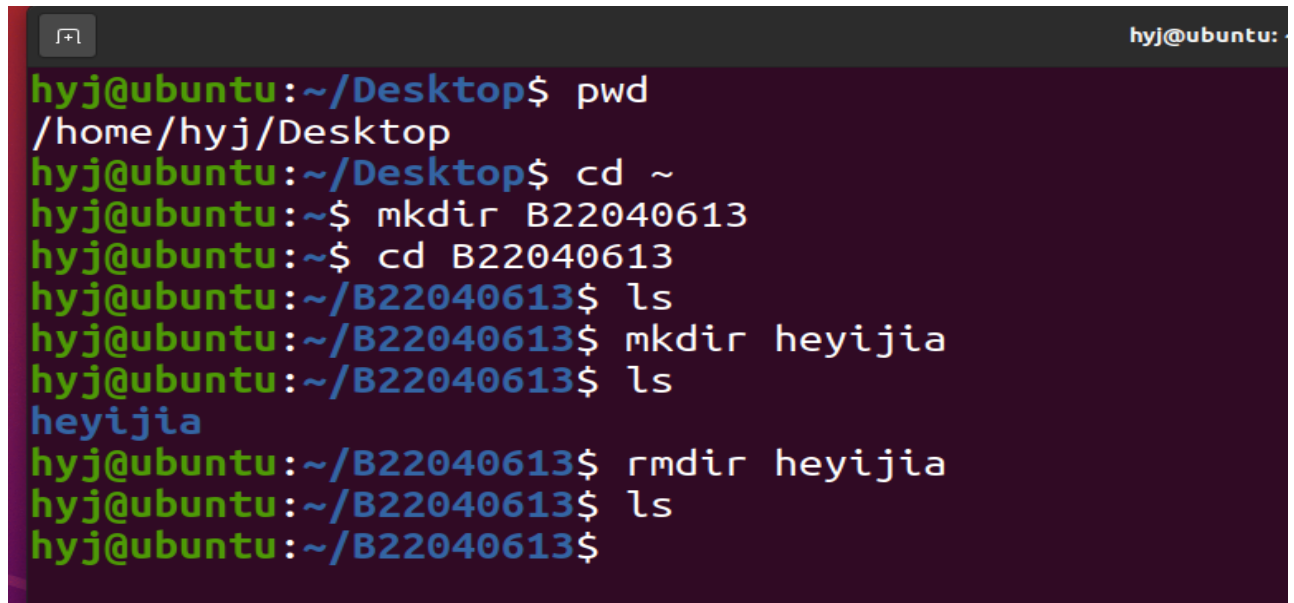


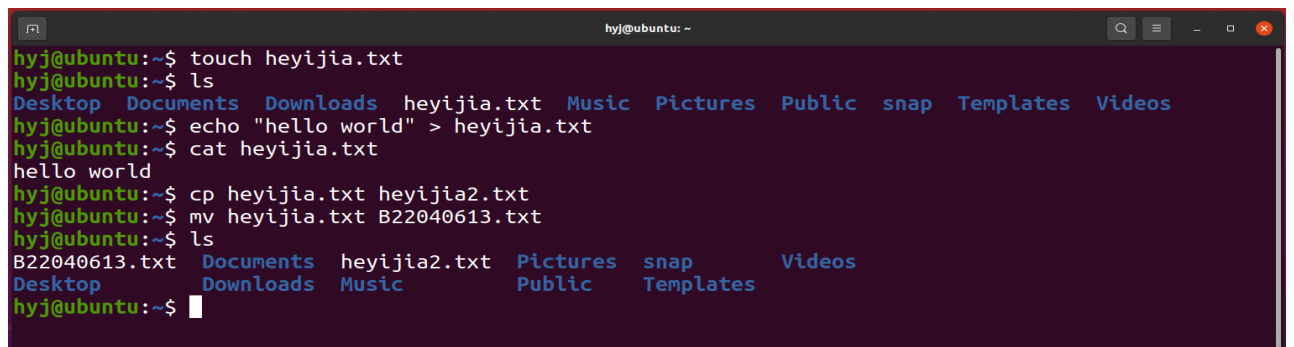
## (1) Directory Operation

A terminal window titled 'hyj@ubuntu: ~' showing a series of commands and their outputs. The user starts in the Desktop directory, moves to the home directory, creates a new directory named 'B22040613', enters it, creates a subdirectory named 'heyijia', and then removes it. The terminal text is as follows:

```
hyj@ubuntu:~/Desktop$ pwd
/home/hyj/Desktop
hyj@ubuntu:~/Desktop$ cd ~
hyj@ubuntu:~$ mkdir B22040613
hyj@ubuntu:~$ cd B22040613
hyj@ubuntu:~/B22040613$ ls
hyj@ubuntu:~/B22040613$ mkdir heyijia
hyj@ubuntu:~/B22040613$ ls
heyijia
hyj@ubuntu:~/B22040613$ rmdir heyijia
hyj@ubuntu:~/B22040613$ ls
hyj@ubuntu:~/B22040613$
```

图 1 Directory Opreation

## (2) File operation

A terminal window titled 'hyj@ubuntu: ~' showing file operations. The user creates a file 'heyijia.txt', lists the contents of the home directory, echoes 'hello world' into the file, cat's the file, copies it to 'heyijia2.txt', moves it to 'B22040613.txt', and lists the contents of the new directory. The terminal text is as follows:

```
hyj@ubuntu:~$ touch heyijia.txt
hyj@ubuntu:~$ ls
Desktop  Documents  Downloads  heyijia.txt  Music  Pictures  Public  snap  Templates  Videos
hyj@ubuntu:~$ echo "hello world" > heyijia.txt
hyj@ubuntu:~$ cat heyijia.txt
hello world
hyj@ubuntu:~$ cp heyijia.txt heyijia2.txt
hyj@ubuntu:~$ mv heyijia.txt B22040613.txt
hyj@ubuntu:~$ ls
B22040613.txt  Documents  heyijia2.txt  Pictures  snap  Videos
Desktop        Downloads  Music         Public    Templates
hyj@ubuntu:~$
```

图 2 File Opreation

## (3) User Management

Creat new user and switch to the user.

```
root@ubuntu:/home/hyj# groupadd student
root@ubuntu:/home/hyj# whoami
root
root@ubuntu:/home/hyj# adduser B22040613
adduser: 请输入匹配 NAME_REGEX[_SYSTEM] 配置选项配置的正则表达式的用户名。
使用 --force-badname 选项可以放松检查或者重新配置 NAME_REGEX。
root@ubuntu:/home/hyj# adduser 22040613
adduser: 请输入匹配 NAME_REGEX[_SYSTEM] 配置选项配置的正则表达式的用户名。
使用 --force-badname 选项可以放松检查或者重新配置 NAME_REGEX。
root@ubuntu:/home/hyj# adduser b22040613
正在添加用户 "b22040613"...
正在添加新组 "b22040613" (1002)...
正在添加新用户 "b22040613" (1001) 到组 "b22040613"...
创建主目录 "/home/b22040613"...
正在从 "/etc/skel" 复制文件...
新的 密码:
重新输入新的 密码:
passwd: 已成功更新密码
正在改变 b22040613 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@ubuntu:/home/hyj#
```

图 3 Creat new user

```
root@ubuntu: ~
hyj@ubuntu:~$ sudo su root
[sudo] hyj 的密码:
root@ubuntu:/home/hyj# mkdir others
root@ubuntu:/home/hyj# ls
Desktop  Downloads  others  Public  Templates
Documents  Music  Pictures  snap  Videos
root@ubuntu:/home/hyj# cd others
root@ubuntu:/home/hyj/others# touch awp.txt fn57.txt
root@ubuntu:/home/hyj/others# ls
awp.txt  fn57.txt
```

图 4 User Management

## (4) Permission management

```
root@ubuntu:/home/b22040613# chmod 777 demo
root@ubuntu:/home/b22040613# ls -l demp
ls: 无法访问 'demp': 没有那个文件或目录
root@ubuntu:/home/b22040613# ls -l demo
-rwxrwxrwx 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod a-x demo
root@ubuntu:/home/b22040613# ls -l demo
-rw-rw-rw- 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod go-w demo
root@ubuntu:/home/b22040613# ls -l demo
-rw-r--r-- 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod g+w demo
root@ubuntu:/home/b22040613# ls -l demo
-rw-rw-r-- 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod a= demo
root@ubuntu:/home/b22040613# ls -l demo
----- 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod +t demo
root@ubuntu:/home/b22040613# ls -l demo
-----T 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod u+s demo
root@ubuntu:/home/b22040613# ls -l demo
---S-----T 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod u+rx demo
root@ubuntu:/home/b22040613# ls -l demo
-r-s-----T 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613# chmod g+rws demo
root@ubuntu:/home/b22040613# ls -l demo
-r-srws--T 1 root root 0 Oct 13 18:55 demo
root@ubuntu:/home/b22040613#
```

图 5 Permission management

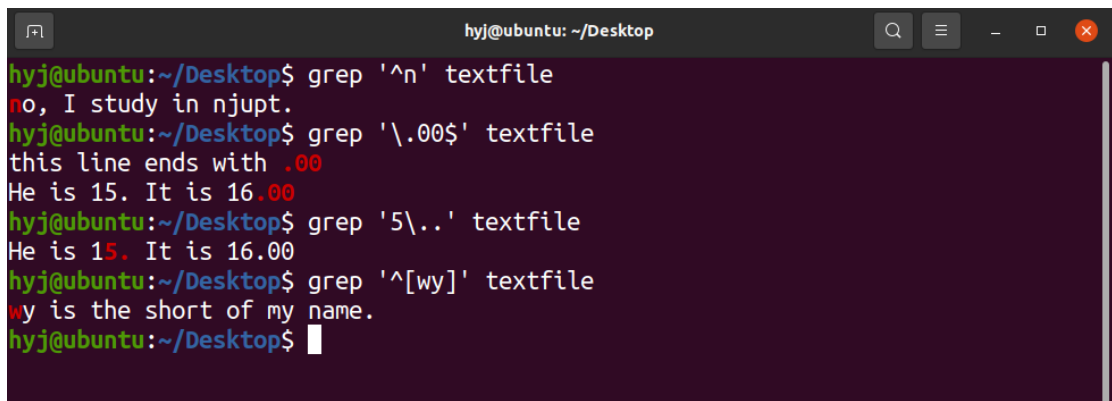
## (5) Other management

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.

Observe changes in the process. Create a textfile file and make it as follows:

```
root@ubuntu:/home/hyj# tar -czvf backup.tar.gz others
others/
others/fn57.txt
others/backup.tar
others/awp.txt
root@ubuntu:/home/hyj# ls -l
总用量 44
-rw-r--r-- 1 root root 245 Oct 13 19:05 backup.tar.gz
drwxr-xr-x 6 hyj hyj 4096 Oct 11 20:17 Desktop
drwxr-xr-x 2 hyj hyj 4096 Apr 1 2024 Documents
drwxr-xr-x 2 hyj hyj 4096 Jun 11 16:56 Downloads
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Music
drwxr-xr-x 2 root root 4096 Oct 13 19:04 others
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Pictures
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Public
drwx----- 3 hyj hyj 4096 Apr 1 2024 snap
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Templates
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Videos
root@ubuntu:/home/hyj# tar -xzvf backup.tar.gz
others/
others/fn57.txt
others/backup.tar
others/awp.txt
root@ubuntu:/home/hyj# ls -l
ls-l: 未找到命令
root@ubuntu:/home/hyj# ls -l
总用量 44
-rw-r--r-- 1 root root 245 Oct 13 19:05 backup.tar.gz
drwxr-xr-x 6 hyj hyj 4096 Oct 11 20:17 Desktop
drwxr-xr-x 2 hyj hyj 4096 Apr 1 2024 Documents
drwxr-xr-x 2 hyj hyj 4096 Jun 11 16:56 Downloads
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Music
drwxr-xr-x 2 root root 4096 Oct 13 19:04 others
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Pictures
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Public
drwx----- 3 hyj hyj 4096 Apr 1 2024 snap
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Templates
drwxr-xr-x 2 hyj hyj 4096 Mar 31 2024 Videos
root@ubuntu:/home/hyj#
```

图 6 Tar Operation



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

图 7 Search Operation