（1） Directory Operation

```
b21050320zjr@cry-virtual-machine:/home/cry$ pwd
/home/cry
b21050320zjr@cry-virtual-machine:/home/cry$ cd ~
b21050320zjr@cry-virtual-machine:~$ mkdir b21050320
b21050320zjr@cry-virtual-machine:~$ cd b21050320
b21050320zjr@cry-virtual-machine:~/b21050320$ mkdir 朱佳瑞
b21050320zjr@cry-virtual-machine:~/b21050320$ ls
朱佳瑞
b21050320zjr@cry-virtual-machine:~/b21050320$ rmdir 朱佳瑞
b21050320zjr@cry-virtual-machine:~/b21050320$ ls
b21050320zjr@cry-virtual-machine:~/b21050320$
```

（2） File operation

```
b21050320zjr@cry-virtual-machine:~/b21050320$ cd ~
b21050320zjr@cry-virtual-machine:~$ touch 朱佳瑞.txt
b21050320zjr@cry-virtual-machine:~$ ls
b21050320  朱佳瑞.txt
b21050320zjr@cry-virtual-machine:~$ echo "hello world" > 朱佳瑞.txt
b21050320zjr@cry-virtual-machine:~$ cat 朱佳瑞.txt
hello world
b21050320zjr@cry-virtual-machine:~$ cp 朱佳瑞.txt 朱佳瑞2.txt
b21050320zjr@cry-virtual-machine:~$ mv 朱佳瑞.txt b21050320.txt
b21050320zjr@cry-virtual-machine:~$ ls
b21050320  b21050320.txt 朱佳瑞2.txt
```

（3） User Management

```
b21050320zjr@cry-virtual-machine:~$ whoami
b21050320zjr
b21050320zjr@cry-virtual-machine:~$ sudo su root
[sudo] password for b21050320zjr:
root@cry-virtual-machine:/home/b21050320zjr# groupadd student
groupadd: group 'student' already exists
       y-virtual-machine:/home/b21050320zjr# whoami
root
root@cry-virtual-machine:/home/b21050320zjr# adduser b21050320
Adding user `b21050320' ...
Adding new group `b21050320' (1003) ...
Adding new user `b21050320' (1002) with group `b21050320' ...
Creating home directory `/home/b21050320' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: password updated successfully
Changing the user information for b21050320
```

```
root@cry-virtual-machine:/home/b21050320zjr# usermod -g student b21050320
root@cry-virtual-machine:/home/b21050320zjr# su b210503020
su: user b210503020 does not exist or the user entry does not contain all the required fields
root@cry-virtual-machine:/home/b21050320zjr# su b21050320
```

```
b21050320@cry-virtual-machine:/home/b21050320zjr$ su b21050320
Password:
b21050320@cry-virtual-machine:/home/b21050320zjr$ cd ~
b21050320@cry-virtual-machine:~$ touch 朱佳瑞.txt
b21050320@cry-virtual-machine:~$ ls -l
total 0
-rw-r--r-- 1 b21050320 student 0 12月  9 16:50 朱佳瑞.txt
```

（4）   Permission management

```
b21050320@cry-virtual-machine:~$ touch demo
b21050320@cry-virtual-machine:~$ chmod 777 demo
b21050320@cry-virtual-machine:~$ chmod a-x demo
b21050320@cry-virtual-machine:~$ chmod go-w demo
b21050320@cry-virtual-machine:~$ chmod g+w demo
b21050320@cry-virtual-machine:~$ chmod a= demo
b21050320@cry-virtual-machine:~$ chmod +t demo
b21050320@cry-virtual-machine:~$ chmod u+s demo
b21050320@cry-virtual-machine:~$ chmod u+rx demo
b21050320@cry-virtual-machine:~$ chmod g+rws demo
b21050320@cry-virtual-machine:~$ ls -l demo
-r-srwS--T 1 b21050320 student 0 12月  9 16:54 demo
```

（5）   Other management

```
b21050320@cry-virtual-machine:~$ touch others
b21050320@cry-virtual-machine:~$ tar -czvf backup.tar.gz others
others
b21050320@cry-virtual-machine:~$ ls -l
total 4
-r-- 1 b21050320 student 120 12月  9 16:58 backup.tar.gz
-r-srwS--T 1 b21050320 student   0 12月  9 16:54 demo
-rw-r--r-- 1 b21050320 student   0 12月  9 16:58 others
-rw-r--r-- 1 b21050320 student   0 12月  9 16:50 朱佳瑞.txt
b21050320@cry-virtual-machine:~$ tar -xzvf backup.tar.gz
others
b21050320@cry-virtual-machine:~$ ls -l
total 4
-rw-r--r-- 1 b21050320 student 120 12月  9 16:58 backup.tar.gz
-r-srwS--T 1 b21050320 student   0 12月  9 16:54 demo
-rw-r--r-- 1 b21050320 student   0 12月  9 16:58 others
-rw-r--r-- 1 b21050320 student   0 12月  9 16:50 朱佳瑞.txt
```