

实验一

(1) Directory Operation

```
leo@leo-virtual-machine:~/linuxB22040503/Experiment1$ pwd
/home/leo/linuxB22040503/Experiment1
leo@leo-virtual-machine:~/linuxB22040503/Experiment1$ cd ~
leo@leo-virtual-machine:~$ mkdir B22040503
leo@leo-virtual-machine:~$ cd B22040503
leo@leo-virtual-machine:~/B22040503$ mkdir 郑涵予
leo@leo-virtual-machine:~/B22040503$ ls
郑涵予
leo@leo-virtual-machine:~/B22040503$ rmdir 郑涵予
leo@leo-virtual-machine:~/B22040503$ ls
leo@leo-virtual-machine:~/B22040503$
```

(2) File operation

```
leo@leo-virtual-machine:~/linux_study/Experiment1$ cd ~
leo@leo-virtual-machine:~$ touch zhenghy.txt
leo@leo-virtual-machine:~$ ls
公共的  图片  音乐      b220405032.txt  linux_study
模板    文档  桌面      b22040503.txt   snap
文件    下载  b22040503 CSAPP          zhenghy.txt
视频
leo@leo-virtual-machine:~$ echo "hello world" > zhenghy.txt
leo@leo-virtual-machine:~$ cat zhenghy.txt
hello world
leo@leo-virtual-machine:~$ cp zhenghy.txt zhenghy2.txt
leo@leo-virtual-machine:~$ mv zhenghy.txt b22040503.txt
leo@leo-virtual-machine:~$ ls
公共的  图片  音乐      b220405032.txt  linux_study
模板    文档  桌面      b22040503.txt   snap
文件    下载  b22040503 CSAPP          zhenghy2.txt
视频
leo@leo-virtual-machine:~$ S
```

(3) User Management

```
leo@leo-virtual-machine:~/linux_study/Experiment1$ whoami
leo
leo@leo-virtual-machine:~/linux_study/Experiment1$ sudo su root
[sudo] leo 的密码:
root@leo-virtual-machine:/home/leo/linux_study/Experiment1# groupadd student
root@leo-virtual-machine:/home/leo/linux_study/Experiment1# whoami
root
root@leo-virtual-machine:/home/leo/linux_study/Experiment1# adduser b22040503
正在添加用户"b22040503"...
正在添加新组"b22040503" (1002)...
正在添加新用户"b22040503" (1001) 到组"b22040503"...
创建主目录"/home/b22040503"...
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:
重新输入新的密码:
passwd: 已成功更新密码
正在改变 b22040503 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 []:

root@leo-virtual-machine:/home/leo/linux_study/Experiment1# usermod -g student b22040503
root@leo-virtual-machine:/home/leo/linux_study/Experiment1# su b22040503
b22040503@leo-virtual-machine:/home/leo/linux_study/Experiment1$ cd ~
b22040503@leo-virtual-machine:~$ touch zhenghy.txt
b22040503@leo-virtual-machine:~$ ls -l
总计 0
-rw-r--r-- 1 b22040503 student 0 10月 12 11:45 zhenghy.txt
b22040503@leo-virtual-machine:~$
```

(4) Permission management

```
leo@leo-virtual-machine:~/linux_study/Experiment1$ touch demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod 777 demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod a-x demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod go-w demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod g+w demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod a= demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod +t demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod u+s demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod u+rx demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ chmod g+rws demo
leo@leo-virtual-machine:~/linux_study/Experiment1$ ls -l demo
-r-srws--T 1 leo leo 0 10月 12 11:48 demo
leo@leo-virtual-machine:~/linux_study/Experiment1$
```

(5) Other Management

```
leo@leo-virtual-machine:~/others$ cd ~
leo@leo-virtual-machine:~$ tar -czvf backup.tar.gz others
others/
others/backup.tar.gz
others/test2
others/test1
leo@leo-virtual-machine:~$ ls -l
总计 64
drwxr-xr-x 2 leo leo 4096 4月 2 2024 公共的
drwxr-xr-x 2 leo leo 4096 4月 1 2024 模板
drwxr-xr-x 2 leo leo 4096 4月 1 2024 视频
drwxr-xr-x 2 leo leo 4096 4月 1 2024 图片
drwxr-xr-x 2 leo leo 4096 4月 1 2024 文档
drwxr-xr-x 2 leo leo 4096 6月 29 21:22 下载
drwxr-xr-x 2 leo leo 4096 4月 1 2024 音乐
drwxr-xr-x 3 leo leo 4096 4月 6 2024 桌面
drwxrwxr-x 2 leo leo 4096 10月 12 11:33 b22040503
-rw-rw-r-- 1 leo leo 12 10月 12 11:40 b22040503.txt
-rw-rw-r-- 1 leo leo 250 10月 14 11:02 backup.tar.gz
drwxrwxr-x 6 leo leo 4096 10月 12 10:23 CSAPP
drwxrwxr-x 3 leo leo 4096 10月 12 11:26 linux_study
drwxrwxr-x 2 leo leo 4096 10月 14 11:01 others
drwx----- 4 leo leo 4096 4月 1 2024 snap
-rw-rw-r-- 1 leo leo 12 10月 12 11:40 zhenghy2.txt
```



```
leo@leo-virtual-machine:~/b22040503$ cd ~
leo@leo-virtual-machine:~$ tar -xzvf backup.tar.gz
others/
others/backup.tar.gz
others/test2
others/test1
leo@leo-virtual-machine:~$ ls -l
总计 40
drwxr-xr-x 8 leo leo 4096 10月 14 11:05 公共的
drwxr-xr-x 3 leo leo 4096 4月 6 2024 桌面
drwxrwxr-x 2 leo leo 4096 10月 12 11:33 b22040503
-rw-rw-r-- 1 leo leo 12 10月 12 11:40 b22040503.txt
-rw-rw-r-- 1 leo leo 250 10月 14 11:02 backup.tar.gz
drwxrwxr-x 6 leo leo 4096 10月 12 10:23 CSAPP
drwxrwxr-x 3 leo leo 4096 10月 12 11:26 linux_study
drwxrwxr-x 2 leo leo 4096 10月 14 11:01 others
drwx----- 4 leo leo 4096 4月 1 2024 snap
-rw-rw-r-- 1 leo leo 12 10月 12 11:40 zhenghy2.txt
```

```
leo@leo-virtual-machine:~$ grep '^n' b22040503.txt
no, I study in njupt.
leo@leo-virtual-machine:~$ grep '\.00$' b22040503.txt
this line ends with .00
He is 15. It is 16.00
leo@leo-virtual-machine:~$ grep '5\.. ' b22040503.txt
He is 15. It is 16.00
leo@leo-virtual-machine:~$ grep '^[wy]' b22040503.txt
wy is the short of my name.
leo@leo-virtual-machine:~$
```