Homework 1

11811901

樊顺

1.

```
aries@aries-VirtualBox:~$ mkdir ~/11811901
aries@aries-VirtualBox:~$ █
```

2.

```
aries@aries-VirtualBox:~$ ls -la ~
total 88
drwxr-xr-x 18 aries aries 4096 2月   2 10:20 .
drwxr-xr-x  3 root  root  4096 1月  20 16:37 ..
drwxrwxr-x  2 aries aries 4096 2月   2 10:20 11811901
-rw-------  1 aries aries   49 1月  20 18:20 .bash_history
-rw-r--r--  1 aries aries  220 1月  20 16:37 .bash_logout
-rw-r--r--  1 aries aries 3771 1月  20 16:37 .bashrc
drwx------ 12 aries aries 4096 1月  20 17:18 .cache
drwx------ 12 aries aries 4096 1月  20 18:20 .config
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Desktop
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Documents
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Downloads
drwx------  3 aries aries 4096 2月   2 10:16 .gnupg
drwx------  3 aries aries 4096 1月  20 17:11 .local
drwx------  5 aries aries 4096 1月  20 17:18 .mozilla
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Music
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Pictures
-rw-r--r--  1 aries aries  807 1月  20 16:37 .profile
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Public
drwxr-xr-x  3 aries aries 4096 1月  20 17:15 snap
drwx------  2 aries aries 4096 1月  20 17:20 .ssh
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Templates
drwxr-xr-x  2 aries aries 4096 1月  20 17:12 Videos
aries@aries-VirtualBox:~$ █
```

3.

```
aries@aries-VirtualBox:~$ cd ~/11811901
aries@aries-VirtualBox:~/11811901$
```

4.

```
aries@aries-VirtualBox:~/11811901$ man grep
aries@aries-VirtualBox:~/11811901$
```

```
        recursive  searches  examine  the  working directory, and nonrecursive
        searches read standard input.

        In addition, the variant programs egrep, fgrep and rgrep are the  same
        as  grep -E,  grep -F,  and grep -r, respectively.  These variants are
        deprecated, but are provided for backward compatibility.

   OPTIONS
      Generic Program Information
           --help Output a usage message and exit.

           -V, --version
                  Output the version number of grep and exit.

      Pattern Syntax
           -E, --extended-regexp
                  Interpret PATTERNS as extended regular expressions  (EREs,  see
                  below).

           -F, --fixed-strings
                  Interpret PATTERNS as fixed strings, not regular expressions.

           -G, --basic-regexp
                  Interpret  PATTERNS  as  basic  regular  expressions (BREs, see
                  below).  This is the default.

           -P, --perl-regexp
                  Interpret  PATTERNS  as  Perl-compatible  regular   expressions
   Manual page grep(1) line 18 (press h for help or q to quit)
```

5.

```
aries@aries-VirtualBox:~/11811901$ mv ~/11811901 /home
mv: cannot move '/home/aries/11811901' to '/home/11811901': Permission denied
aries@aries-VirtualBox:~/11811901$ sudo mv ~/11811901 /home
[sudo] password for aries:
aries@aries-VirtualBox:~/11811901$ ls /home
11811901   aries
aries@aries-VirtualBox:~/11811901$
```

6.

```
aries@aries-VirtualBox:~/11811901$ rm -r /home/11811901
rm: cannot remove '/home/11811901': Permission denied
aries@aries-VirtualBox:~/11811901$ sudo rm -r /home/11811901
aries@aries-VirtualBox:~/11811901$
```
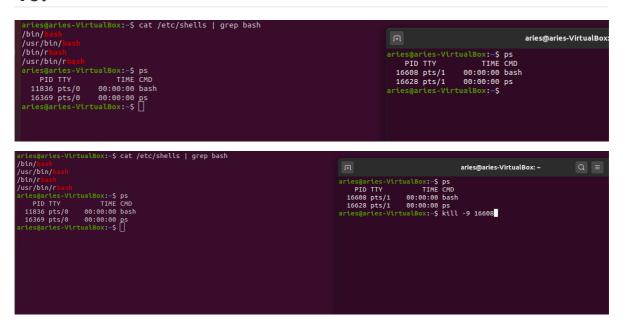
7.

```
aries@aries-VirtualBox:/home$ cp /etc/apt/sources.list /etc/apt/sourcres.list.b
ak
cp: cannot create regular file '/etc/apt/sourcres.list.bak': Permission denied
aries@aries-VirtualBox:/home$ sudo cp /etc/apt/sources.list /etc/apt/sourcres.l
ist.bak
aries@aries-VirtualBox:/home$
```

8.

```
aries@aries-VirtualBox:/home$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
/bin/dash
/usr/bin/dash
aries@aries-VirtualBox:/home$
```

9.

```
aries@aries-VirtualBox:~$ cat /etc/shells | grep bash
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
aries@aries-VirtualBox:~$
```

10.

```
aries@aries-VirtualBox:~$ cat /etc/shells | grep bash
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
aries@aries-VirtualBox:~$ ps
    PID TTY          TIME CMD
  11836 pts/0    00:00:00 bash
  16369 pts/0    00:00:00 ps
aries@aries-VirtualBox:~$
```

```
                                    aries@aries-VirtualBox:
aries@aries-VirtualBox:~$ ps
    PID TTY          TIME CMD
  16608 pts/1    00:00:00 bash
  16628 pts/1    00:00:00 ps
aries@aries-VirtualBox:~$
```

```
aries@aries-VirtualBox:~$ cat /etc/shells | grep bash
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
aries@aries-VirtualBox:~$ ps
    PID TTY          TIME CMD
  11836 pts/0    00:00:00 bash
  16369 pts/0    00:00:00 ps
aries@aries-VirtualBox:~$
```

```
                                    aries@aries-VirtualBox: ~
aries@aries-VirtualBox:~$ ps
    PID TTY          TIME CMD
  16608 pts/1    00:00:00 bash
  16628 pts/1    00:00:00 ps
aries@aries-VirtualBox:~$ kill -9 16608
```

11.

```
aries@aries-VirtualBox:~/11811901/A1$ vi opt.c
aries@aries-VirtualBox:~/11811901/A1$ ls
opt.c
aries@aries-VirtualBox:~/11811901/A1$ cat opt.c
# include

int main(){
    int x = 0;
    x += 1;
    x += 1;
    x += 1;
    printf("%d\n",x);
    return 0;
}
```

```
aries@aries-VirtualBox:~/11811901/A1$ gcc -o0 -o opt0 opt.c
aries@aries-VirtualBox:~/11811901/A1$ gcc -o1 -o opt1 opt.c
aries@aries-VirtualBox:~/11811901/A1$ l
opt0*  opt1*  opt.c
aries@aries-VirtualBox:~/11811901/A1$ ls
opt0  opt1  opt.c
aries@aries-VirtualBox:~/11811901/A1$ cat opt0
```

(binary output)

```
aries@aries-VirtualBox:~/11811901/A1$ cat opt1
```

(binary output)

```
aries@aries-VirtualBox:~/11811901/A1$ ./opt0
3
aries@aries-VirtualBox:~/11811901/A1$ ./opt1
3
```