Homework5

1.1

```
[ese-zhangyx@login03 ~]$ ls

data_demo exam
[ese-zhangyx@login03 ~]$ ln -s data_demo data_demo_link
[ese-zhangyx@login03 ~]$ ls

data_demo data_demo_link exam
[ese-zhangyx@login03 ~]$ __
```

1.2

```
[ese-zhangyx@login03 ~]$ echo $HOME
/work/ese-zhangyx
```

1.3

```
[ese-zhangyx@login03 ~]$ cd data_demo/molecules/
[ese-zhangyx@login03 molecules]$ touch test.pdb
[ese-zhangyx@login03 molecules]$ ls
cubane.pdb ethane.pdb methane.pdb octane.pdb pentane.pdb propane.pdb test.pdb
```

1.4

```
[ese-zhangyx@login03 ~]$ find data_demo/data/elements/ -type f | wc -l
103
```

1.5

```
[ese-zhangyx@login03 ~]$ diff data_demo/data/pdb/ethane.pdb data_demo/data/pdb/ethanol.pdb
1,11c1,12
  COMPND
                                      ETHANE
  AUTHOR
                                     DAVE WOODCOCK 95 12 18

        DAVE WOODCOCK
        95 12 18

        1 C
        1
        -0.752
        0.001
        -0.141
        1.00
        0.00

        2 C
        1
        0.752
        -0.001
        0.141
        1.00
        0.00

        3 H
        1
        -1.158
        0.991
        0.070
        1.00
        0.00

        4 H
        1
        -1.240
        -0.737
        0.496
        1.00
        0.00

        5 H
        1
        -0.924
        -0.249
        -1.188
        1.00
        0.00

        6 H
        1
        1.158
        -0.991
        -0.070
        1.00
        0.00

        7 H
        1
        0.924
        0.249
        1.188
        1.00
        0.00

        8 H
        1
        1.240
        0.737
        -0.496
        1.00
        0.00

  ATOM
  ATOM
   ATOM
   ATOM
    ATOM
    ATOM
    MOTA
    MOTA
    TER
   COMPND
                                    ETHANOL
                                    DAVE WOODCOCK 96 01 03
                                                    1 -0.426 -0.115 -0.147 1.00 0.00
1 -0.599 1.244 -0.481 1.00 0.00
  ATOM
                                2 0
   ATOM
                                                                                        -0.750 -0.738 -0.981 1.00 0.00
-1.022 -0.351 0.735 1.00 0.00
-1.642 1.434 -0.689 1.00 0.00
1.047 -0.383 0.147 1.00 0.00
1.370 0.240 0.981 1.00 0.00
   ATOM
   ATOM
    ATOM
   ATOM
    ATOM
                                                                                           1.642 -0.147 -0.735 1.00 0.00
    ATOM
                                                                                            1.180 -1.434 0.405 1.00 0.00
    ATOM
                             10
  TER
```

```
[ese-zhangyx@login03 ~]$ grep 'But she' data_demo/writing/data/LittleWomen.txt
"Oh, bless you, no! But she let old Belsham rest, and when I ran back
small quaver in her voice, "I came to thank you, sir, for..." But she
than she went. But she begged so hard, and Sallie had promised to take
But she does not hunt as our darling did,
But she only spits at the dogs our pet
But she is not fair to see,
queer thing for her to do, she doesn't act a bit like herself. But she
aspirant for fame, with philosophic composure. But she made a wry face
her. But she can pet and comfort him after I'm gone, and so cure him
to see signs of hope in the faint color on Beth's cheeks. But she
But she did not get it, for though he joined her and answered all her
sketchbook. But she tucked it under her arm with a sharp...
Amy did any of these fond and foolish things. But she certainly did
But she did show something better than brilliancy or skill, for she
grasshopper. But she would have consented if he had proposed to sing a
[ese-zhangyx@login03 ~]$ grep 'But she' data_demo/writing/data/LittleWomen.txt | wc -1
```

1.7

1.8

```
[ese-zhangyx@login03 ~]$ cp -r data demo/writing/ data demo/writing new/
[ese-zhangyx@login03 ~]$ cd data demo
[ese-zhangyx@login03 data_demo]$ ls
 reatures log1 molecules
            log2 north-pacific-gyre pizza.cfg temp
[ese-zhangyx@login03 data_demo]$ zip writing_new.zip writing_new/
 adding: writing new/ (stored 0%)
[ese-zhangyx@login03 data_demo]$ ls
 reatures log1 molecules
        log2 north-pacific-gyre pizza.cfg temp
[ese-zhangyx@login03 data_demo]$ ls
 reatures log1 molecules notes solar.pd
ata log2 north-pacific-gyre pizza.cfg temp
ese-zhangyx@login03 data demo]$ rm writing new
ese-zhangyx@login03 data_demo]$ ls
                                               solar.pdf writing
temp writing_new.zip
 reatures log1 molecules ata log2 north-pacific-
          log2
[ese-zhangyx@login03 data_demo]$ unzip writing_new.zip
Archive: writing_new.zip
 creating: writing_new/
ese-zhangyx@login03 data demo]$ ls
reatures log1 molecules notes ata log2 north-pacific-gyre pizza.
                                               solar.pdf writing
temp writing_new
                               gyre pizza.cfg temp
[ese-zhangyx@login03 data_demo]$ 🕳
```

```
[ese-zhangyx@login03 data demo]$ chmod 750 writing new
[ese-zhangyx@login03 data_demo]$ ls -1
total 134
drwxr-xr-x 2 ese-zhangyx ese-ouycc 4096 Dec 5 13:14 creatures
drwxr-xr-x 5 ese-zhangyx ese-ouycc 4096 Dec 5 13:14 data
-rw-r--r-- 1 ese-zhangyx ese-ouycc 637 Dec 5 13:14 log1
-rw-r--r-- 1 ese-zhangyx ese-ouycc 1274 Dec 5 13:14 log2
drwxr-xr-x 2 ese-zhangyx ese-ouycc 4096 Dec 5 13:20 molecules
drwxr-xr-x 3 ese-zhangyx ese-ouycc 4096 Dec 5 13:14 north-pacific-gyre
-rwxr-xr-x 1 ese-zhangyx ese-ouycc 76 Dec 5 13:14 notes
-rwxr-xr-x 1 ese-zhangyx ese-ouycc 32 Dec 5 13:14 pizza.cfg
-rwxr-xr-x 1 ese-zhangyx ese-ouycc 21583 Dec 5 13:14 solar.pdf
-rw-r--r-- 1 ese-zhangyx ese-ouycc
                                     20 Dec 5 13:14 temp
drwxr-xr-x 5 ese-zhangyx ese-ouycc 4096 Dec 5 13:14 writing
drwxr-x--- 2 ese-zhangyx ese-ouycc 4096 Dec 5 13:39 writing_new
-rw-r--r-- 1 ese-zhangyx ese-ouycc 174 Dec 5 13:43 writing new.zip
```

1.10

```
[ese-zhangyx@login03 data_demo]$ history 10
  122 history -d 10
  123 ls
  124 history --help
  125 history -help
  126 history -h
  127 history
  128 man history
  129 history -n 10
  130 history -10
  131 history 10
[ese-zhangyx@login03 data demo]$
```

2.1

≥ 选择OpenSSH SSH client

```
[ese-zhangyx@login03 data]$ bash print.sh
11193 pdb/lanoxin.pdb
490 pdb/methanol.pdb
1694 pdb/citronellal.pdb
2729 pdb/norethindrone.pdb
4209 pdb/heme.pdb
2123 pdb/mustard.pdb
306 pdb/ammonia.pdb
1444 pdb/ascorbic-acid.pdb
1064 pdb/lactic-acid.pdb
422 pdb/methane.pdb
2288 pdb/morphine.pdb
2287 pdb/piperine.pdb
2562 pdb/maltose.pdb
2787 pdb/testosterone.pdb
2196 pdb/thiamine.pdb
3303 pdb/quinine.pdb
2103 pdb/tyrian-purple.pdb
2395 pdb/tuberin.pdb
1090 pdb/cinnamaldehyde.pdb
2894 pdb/vitamin-a.pdb
2396 pdb/ethylcyclohexane.pdb
2675 pdb/strychnine.pdb
2562 pdb/sucrose.pdb
1226 pdb/pentane.pdb
1680 pdb/nerol.pdb
423 pdb/vinyl-chloride.pdb
1830 pdb/camphene.pdb
1516 pdb/aldrin.pdb
1158 pdb/cubane.pdb
690 pdb/ethanol.pdb
5049 pdb/cholesterol.pdb
895 pdb/cyclobutane.pdb
1508 pdb/tnt.pdb
1361 pdb/vanillin.pdb
1869 pdb/mint.pdb
1256 pdb/pyridoxal.pdb
622 pdb/ethane.pdb
1030 pdb/benzaldehyde.pdb
3395 pdb/1sd.pdb
825 pdb/propane.pdb
1384 pdb/cyclohexanol.pdb
765 pdb/glycol.pdb
2452 pdb/codeine.pdb
1159 pdb/styrene.pdb
695 pdb/cyclopropane.pdb
2164 pdb/menthol.pdb
1828 pdb/octane.pdb
2562 pdb/lactose.pdb
[ese-zhangyx@login03 data]$
```

选择OpenSSH SSH client