

# Report of assignment 5

## 1.1 ln

```
[ese-zengwk@login02 ~]$ ln -s data_demo_link ./data_demo/
[ese-zengwk@login02 ~]$ cd ./data_demo/
[ese-zengwk@login02 data_demo]$ ll
total 133
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Nov 24 19:32 creatures
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Nov 24 19:32 data
lrwxrwxrwx 1 ese-zengwk ese-ouycc 14 Dec  8 09:59 data_demo_link -> data_demo
link
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Nov 24 19:32 molecules
-rw-r--r-- 1 ese-zengwk ese-ouycc 18 Nov 24 19:55 myfile
drwxr-xr-x 3 ese-zengwk ese-ouycc 4096 Nov 24 19:32 north-pacific-gyre
-rwxr-xr-x 1 ese-zengwk ese-ouycc 69 Nov 24 19:32 notes
-rwxr-xr-x 1 ese-zengwk ese-ouycc 32 Nov 24 19:32 pizza.cfg
-rwxr-xr-x 1 ese-zengwk ese-ouycc 21583 Nov 24 19:32 solar.pdf
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Nov 24 19:53 test
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Nov 24 19:32 writing
[ese-zengwk@login02 data_demo]$
```

## 1.2 echo

```
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Nov 24 19:53
[ese-zengwk@login02 data_demo]$ echo $HOME
/work/ese-zengwk
[ese-zengwk@login02 data_demo]$
```

## 1.3 touch

```
[ese-zengwk@login02 data_demo]$ cd molecules/
[ese-zengwk@login02 molecules]$ touch test.pdb
[ese-zengwk@login02 molecules]$ ll
total 3
-rwxr-xr-x 1 ese-zengwk ese-ouycc 1158 Nov 24 19:32 cubane.pdb
-rwxr-xr-x 1 ese-zengwk ese-ouycc 622 Nov 24 19:32 ethane.pdb
-rwxr-xr-x 1 ese-zengwk ese-ouycc 422 Nov 24 19:32 methane.pdb
-rwxr-xr-x 1 ese-zengwk ese-ouycc 1828 Nov 24 19:32 octane.pdb
-rwxr-xr-x 1 ese-zengwk ese-ouycc 1226 Nov 24 19:32 pentane.pdb
-rwxr-xr-x 1 ese-zengwk ese-ouycc 825 Nov 24 19:32 propane.pdb
-rw-r--r-- 1 ese-zengwk ese-ouycc 0 Dec  8 10:38 test.pdb
[ese-zengwk@login02 molecules]$
```

## 1.4 find (“104” is result including hidden file, 103 is result including general files)

```
[ese-zengwk@login02 elements]$ find -type f |wc -l
103
[ese-zengwk@login02 elements]$ find |wc -l
104
[ese-zengwk@login02 elements]$
```

## 1.5 diff

```
[ese-zengwk@login02 ~]$ diff data_demo/data/pdb/ethane.pdb data_demo/data/pdb/ethanol.pdb
1,11c1,12
< COMPND          ETHANE
< AUTHOR          DAVE WOODCOCK   95 12 18
< ATOM            1  C              1    -0.752   0.001  -0.141   1.00   0.00
< ATOM            2  C              1     0.752  -0.001   0.141   1.00   0.00
< ATOM            3  H              1    -1.158   0.991   0.070   1.00   0.00
< ATOM            4  H              1    -1.240  -0.737   0.496   1.00   0.00
< ATOM            5  H              1    -0.924  -0.249  -1.188   1.00   0.00
< ATOM            6  H              1     1.158  -0.991  -0.070   1.00   0.00
< ATOM            7  H              1     0.924   0.249   1.188   1.00   0.00
< ATOM            8  H              1     1.240   0.737  -0.496   1.00   0.00
< TER             9                1
---
> COMPND          ETHANOL
> AUTHOR          DAVE WOODCOCK   96 01 03
> ATOM            1  C              1    -0.426  -0.115  -0.147   1.00   0.00
> ATOM            2  O              1    -0.599   1.244  -0.481   1.00   0.00
> ATOM            3  H              1    -0.750  -0.738  -0.981   1.00   0.00
> ATOM            4  H              1    -1.022  -0.351   0.735   1.00   0.00
> ATOM            5  H              1    -1.642   1.434  -0.689   1.00   0.00
> ATOM            6  C              1     1.047  -0.383   0.147   1.00   0.00
> ATOM            7  H              1     1.370   0.240   0.981   1.00   0.00
> ATOM            8  H              1     1.642  -0.147  -0.735   1.00   0.00
> ATOM            9  H              1     1.180  -1.434   0.405   1.00   0.00
> TER            10                1
```

## 1.6 grep. Count “But she” number: 15

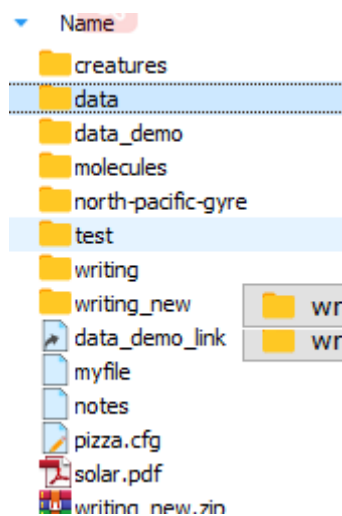
```
[ese-zengwk@login02 ~]$ grep 'But she' data_demo/writing/data/LittleWomen.txt
"oh, bless you, no! But she let old Belsham rest, and when I ran back
small quaver in her voice, "I came to thank you, sir, for..." But she
than she went. But she begged so hard, and Sallie had promised to take
But she 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-zengwk@login02 ~]$ grep -n 'But she' data_demo/writing/data/LittleWomen.txt
1808:"oh, bless you, no! But she let old Belsham rest, and when I ran back
2746:small quaver in her voice, "I came to thank you, sir, for..." But she
3635:than she went. But she begged so hard, and Sallie had promised to take
4535: But she does not hunt as our darling did,
4540: But she only spits at the dogs our pet
4544: But she is not fair to see,
4879:queer thing for her to do, she doesn't act a bit like herself. But she
13203:aspirant for fame, with philosophic composure. But she made a wry face
14085:her. But she can pet and comfort him after I'm gone, and so cure him
15723:to see signs of hope in the faint color on Beth's cheeks. But she
16081:But she did not get it, for though he joined her and answered all her
16912:sketchbook. But she tucked it under her arm with a sharp...
17939:Amy did any of these fond and foolish things. But she certainly did
19071:But she did show something better than brilliancy or skill, for she
19091:grasshopper. But she would have consented if he had proposed to sing a
[ese-zengwk@login02 ~]$ grep 'But she' data_demo/writing/data/LittleWomen.txt |
wc -l
15
[ese-zengwk@login02 ~]$
```

### 1.7 du (975k)

```
[ese-zengwk@login02 ~]$ du -sh data_demo/data
975K    data_demo/data
[ese-zengwk@login02 ~]$
```

### 1.8 cp/zip/unzip

```
[ese-zengwk@login02 ~]$ cp -r data_demo/writing/ data_demo/writing_new
[ese-zengwk@login02 ~]$ zip -q -r data_demo/writing_new.zip data_demo/writing_ne
w/
[ese-zengwk@login02 ~]$ zip -q -r data_demo/writing_new.zip data_demo/writing_ne
w/
[ese-zengwk@login02 ~]$ unzip data_demo/writing_new.zip
Archive:  data_demo/writing_new.zip
```



### 1.9 chmod

```
[ese-zengwk@login02 data_demo]$ chmod 750 writing_new
[ese-zengwk@login02 data_demo]$ ll
total 646
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Nov 24 19:32 creatures
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Nov 24 19:32 data
drwxr-xr-x 3 ese-zengwk ese-ouycc 4096 Dec  8 13:41 data_demo
lrwxrwxrwx 1 ese-zengwk ese-ouycc   14 Dec  8 09:59 data_demo_link ->
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Dec  8 10:38 molecules
-rw-r--r-- 1 ese-zengwk ese-ouycc   18 Nov 24 19:55 myfile
drwxr-xr-x 3 ese-zengwk ese-ouycc 4096 Nov 24 19:32 north-pacific-gyre
-rwxr-xr-x 1 ese-zengwk ese-ouycc   69 Nov 24 19:32 notes
-rwxr-xr-x 1 ese-zengwk ese-ouycc   32 Nov 24 19:32 pizza.cfg
-rwxr-xr-x 1 ese-zengwk ese-ouycc 21583 Nov 24 19:32 solar.pdf
drwxr-xr-x 2 ese-zengwk ese-ouycc 4096 Nov 24 19:53 test
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Nov 24 19:32 writing
drwxr-xr-x 5 ese-zengwk ese-ouycc 4096 Dec  8 13:49 writing_new
-rw-r--r-- 1 ese-zengwk ese-ouycc 422844 Dec  8 13:41 writing_new.zip
```

## 1.10 history

```
[ese-zengwk@login02 data_demo]$ history 10
161 zip -q -r data_demo/writing_new.zip writing_new/
162 zip -q -r data_demo/writing_new.zip data_demo/writing_new/
163 unzip data_demo/writing_new.zip
164 cd data_demo/
165 ll
166 chmod 750 writing_new
167 ll
168 history
169 history -10
170 history 10
```

## 2. For

```
[ese-zengwk@login02 pdb]$ for file in *.pdb; do du -sb $file; done
1516 aldrin.pdb
306 ammonia.pdb
1444 ascorbic-acid.pdb
1030 benzaldehyde.pdb
1830 camphene.pdb
5049 cholesterol.pdb
1090 cinnamaldehyde.pdb
1694 citronellal.pdb
2452 codeine.pdb
1158 cubane.pdb
895 cyclobutane.pdb
1384 cyclohexanol.pdb
695 cyclopropane.pdb
622 ethane.pdb
690 ethanol.pdb
2396 ethylcyclohexane.pdb
765 glycol.pdb
4209 heme.pdb
1064 lactic-acid.pdb
2562 lactose.pdb
11193 lanoxin.pdb
3395 lsd.pdb
2562 maltose.pdb
2164 menthol.pdb
422 methane.pdb
490 methanol.pdb
1869 mint.pdb
2288 morphine.pdb
2123 mustard.pdb
1680 nerol.pdb
2729 norethindrone.pdb
1828 octane.pdb
1226 pentane.pdb
2287 piperine.pdb
825 propane.pdb
1256 pyridoxal.pdb
3303 quinine.pdb
2675 strychnine.pdb
1159 styrene.pdb
2562 sucrose.pdb
2787 testosterone.pdb
2196 thiamine.pdb
1508 tnt.pdb
2395 tuberin.pdb
2103 tyrian-purple.pdb
1361 vanillin.pdb
```