

## #1.1

cd ~

cd data\_demo

ln -s data\_demo\_link /work/ese-xied/data\_demo

ls -F

```

[ese-xied@login03 ~]$ ls -F
creatures/  data/  data_demo@_link@  molecules/  north-pacific-gyre/  notes*  pizza.cfg*  solar.pdf*  thesis/  writing/  writing_new/

```

## #1.2

echo \$cd ~

```

[ese-xied@login03 data_demo]$ echo cd ~
cd /work/ese-xied

```

## #1.3

cd molecules

touch test.pdb

ls

```

[ese-xied@login03 molecules]$ ls
cubane.pdb  ethane.pdb  methane.pdb  molecules  octane.pdb  pentane.pdb  propane.pdb  test.pdb

```

## #1.4

cd ..

cd data/elements

find . -type f -print | wc -l

```

[ese-xied@login03 elements]$ find . -type f -print | wc -l
103

```

## #1.5

cd ..

cd pdb

ls

diff ethane.pdb ethanol.pdb

```

[ese-xied@login03 elements]$ cd ..
[ese-xied@login03 data]$ cd pdb
[ese-xied@login03 pdb]$ ls
adrenic.pdb  camphene.pdb  cholesterol.pdb  codeine.pdb  cyclopropane.pdb  glycol.pdb  lanoxin.pdb  methane.pdb  mustard.pdb  pentane.pdb  quinine.pdb  testosterone.pdb  tyrian-purple.pdb
aldrin.pdb  carbamate.pdb  cubane.pdb  cyclobutane.pdb  ethanol.pdb  heme.pdb  lisd.pdb  methanol.pdb  nerol.pdb  piperine.pdb  strychnine.pdb  thiamine.pdb  vanillin.pdb
ammonia.pdb  cinnamaldehyde.pdb  cyclohexane.pdb  ethylcyclohexane.pdb  lactate.pdb  lactose.pdb  maltose.pdb  menthol.pdb  morphine.pdb  octane.pdb  pyridoxal.pdb  sucrose.pdb  vitamin-a.pdb
ascorbic-acid.pdb  citronellol.pdb  cyclohexanol.pdb
[ese-xied@login03 pdb]$ diff ethane.pdb ethanol.pdb
1,11c1,12
< COMPND      ETHANE
<   AUTHOR    DAVE WOODCOCK   95 12 18
<   ATOM       1  C             -0.752  0.001  -0.141  1.00  0.00
<   ATOM       2  C             0.752  -0.001  0.141  1.00  0.00
<   ATOM       3  H             -1.158  0.991  0.070  1.00  0.00
<   ATOM       4  H             -1.240  -0.737  0.496  1.00  0.00
<   ATOM       5  H             -0.924  -0.249  -1.188  1.00  0.00
<   ATOM       6  H             1.158  -0.991  -0.070  1.00  0.00
<   ATOM       7  H             0.924  0.249  1.188  1.00  0.00
<   ATOM       8  H             1.240  0.737  -0.496  1.00  0.00
<   TER        9
--
> COMPND      ETHANOL
>   AUTHOR    DAVE WOODCOCK   96 01 03
>   ATOM       1  C             -0.426  -0.115  -0.147  1.00  0.00
>   ATOM       2  O             -0.599  1.244  -0.481  1.00  0.00
>   ATOM       3  H             -0.750  -0.738  -0.501  1.00  0.00
>   ATOM       4  H             -1.022  -0.351  0.729  1.00  0.00
>   ATOM       5  H             -1.642  1.434  -0.689  1.00  0.00
>   ATOM       6  C             1.047  -0.383  0.147  1.00  0.00
>   ATOM       7  H             1.370  0.240  0.981  1.00  0.00
>   ATOM       8  H             1.642  -0.147  -0.735  1.00  0.00
>   ATOM       9  H             1.180  -1.434  0.405  1.00  0.00
>   TER      10

```

## #1.6

cd ~

cd data\_demo/writing/data

grep -o 'But she' LittleWomen.txt | wc -l

```
[ese-xied@login03 pdb]$ cd ~
[ese-xied@login03 ~]$ cd data_demo/writing/data
[ese-xied@login03 data]$ grep -o 'But she' LittleWomen.txt | wc -l
15
```

### #1.7

cd ~

cd data\_demo/data

du -sh

```
[ese-xied@login03 data]$ cd ~
[ese-xied@login03 ~]$ cd data_demo/data
[ese-xied@login03 data]$ du -sh
721K .
```

### #1.8

cd ..

cp -r writing writing\_new

```
[ese-xied@login03 data_demo]$ cp -r writing writing_new
[ese-xied@login03 data_demo]$ ls -F
creatures/ data/ data_demo@_link@ molecules/ north-pacific-gyre/ notes* pizza.cfg* solar.pdf* thesis/ writing/ writing_new/
```

cd writing\_new

zip -r writing\_neww.zip ./\*

```
[ese-xied@login03 data_demo]$ cd writing_new
[ese-xied@login03 writing_new]$ zip -r writing_neww.zip ./*
  adding: data/ (stored 0%)
  adding: data/one.txt (deflated 53%)
  adding: data/LittleWomen.txt (deflated 61%)
  adding: data/two.txt (deflated 59%)
  adding: haiku.txt (deflated 29%)
  adding: thesis/ (stored 0%)
  adding: thesis/empty-draft.md (stored 0%)
  adding: tools/ (stored 0%)
  adding: tools/stats (stored 0%)
  adding: tools/old/ (stored 0%)
  adding: tools/old/oldtool (stored 0%)
  adding: tools/format (deflated 13%)
```

unzip -o -d /writing\_neww.zip

```
[ese-xied@login03 writing_new]$ unzip -o -d /writing_neww.zip
UnZip 6.00 of 20 April 2009, by Info-ZIP.  Maintained by C. Spieler.  Send
bug reports using http://www.info-zip.org/zip-bug.html; see README for details.

Usage: unzip [-Z] [-opts[modifiers]] file[.zip] [list] [-x xlist] [-d exdir]
Default action is to extract files in list, except those in xlist, to exdir;
file[.zip] may be a wildcard.  -Z => ZipInfo mode ("unzip -Z" for usage).

-p extract files to pipe, no messages      -l list files (short format)
-f freshen existing files, create none     -t test compressed archive data
-u update files, create if necessary       -z display archive comment only
-v list verbosely/show version info       -T timestamp archive to latest
-x exclude files that follow (in xlist)   -d extract files into exdir

modifiers:
-n never overwrite existing files          -q quiet mode (-qq => quieter)
-o overwrite files WITHOUT prompting       -a auto-convert any text files
-j junk paths (do not make directories)   -aa treat ALL files as text
-U use escapes for all non-ASCII Unicode  -UU ignore any Unicode fields
-C match filenames case-insensitively     -L make (some) names lowercase
-X restore UID/GID info                  -V retain VMS version numbers
-K keep setuid/setgid/tacky permissions  -M pipe through "more" pager
-O CHARSET specify a character encoding for DOS, Windows and OS/2 archives
-I CHARSET specify a character encoding for UNIX and other archives

See "unzip -hh" or unzip.txt for more help.  Examples:
unzip data1 -x joe => extract all files except joe from zipfile data1.zip
unzip -p foo | more => send contents of foo.zip via pipe into program more
unzip -fo foo ReadMe => quietly replace existing ReadMe if archive file newer
```

#1.9

Not right, changing to drwxr-x---, not drwx--x---.

chmod 710 writing\_new

Using 750 would be correct, so 1 point was deducted.

ll

```
[ese-xied@login03 data_demo]$ chmod 710 writing_new
[ese-xied@login03 data_demo]$ ll
total 134
drwxr-xr-x 2 ese-xied ese-ouycc 4096 Nov 24 19:30 creatures
drwxr-xr-x 6 ese-xied ese-ouycc 4096 Dec 3 16:18 data
lrwxrwxrwx 1 ese-xied ese-ouycc 9 Dec 5 11:02 data_demo -> 
lrwxrwxrwx 1 ese-xied ese-ouycc 5 Dec 6 10:37 _link -> 
drwxr-xr-x 2 ese-xied ese-ouycc 4096 Dec 5 17:48 molecules
drwxr-xr-x 3 ese-xied ese-ouycc 4096 Nov 24 19:30 north-pacific-gyre
-rwxr-xr-x 1 ese-xied ese-ouycc 69 Nov 24 19:30 notes
-rwxr-xr-x 1 ese-xied ese-ouycc 32 Nov 24 19:30 pizza.cfg
-rwxr-xr-x 1 ese-xied ese-ouycc 21583 Nov 24 19:30 solar.pdf
drwxr-xr-x 4 ese-xied ese-ouycc 4096 Dec 4 15:57 thesis
drwxr-xr-x 5 ese-xied ese-ouycc 4096 Nov 24 19:30 writing
drwx--x--- 5 ese-xied ese-ouycc 4096 Dec 6 11:09 writing_new
[ese-xied@login03 data_demo]$
```

#1.10

history 10

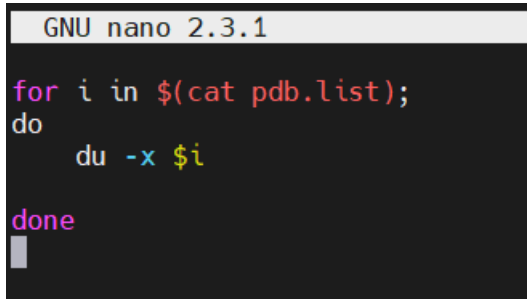
```
[ese-xied@login03 data_demo]$ history 10
368 ls
369 chmod 710 writing_neww
370 chmod 710 writing_new
371 II
372 chmod 710 II writing_new
373 chmod 70 writing_new II
374 chmod 710 writing_new II
375 chmod 710 writing_new
376 ll
377 history 10
```

#2

nano loop.sh

```
for i in $(cat pdb.list);  
do  
    du -x $i
```

```
done
```



```
GNU nano 2.3.1  
  
for i in $(cat pdb.list);  
do  
    du -x $i  
done  
|
```

Not right. Pls use 'du -b \$i' instead of 'du -x \$i'.  
1 point was deducted.

./loop.sh

```
1      aldrin.pdb  
1      ammonia.pdb  
1      ascorbic-acid.pdb  
1      benzaldehyde.pdb  
1      camphene.pdb  
128    cholesterol.pdb  
1      cinnamaldehyde.pdb  
1      citronellal.pdb  
1      codeine.pdb  
1      cubane.pdb  
1      cyclobutane.pdb  
1      cyclohexanol.pdb  
1      cyclopropane.pdb  
1      ethane.pdb  
1      ethanol.pdb  
1      ethylcyclohexane.pdb  
1      glycol.pdb  
128    heme.pdb  
1      lactic-acid.pdb  
1      lactose.pdb  
128    lanoxin.pdb  
1      loop.pdb  
1      lsd.pdb  
1      maltose.pdb  
1      menthol.pdb  
1      methane.pdb  
1      methanol.pdb  
1      mint.pdb  
1      morphine.pdb  
1      mustard.pdb  
1      nerol.pdb  
1      norethindrone.pdb  
1      octane.pdb  
1      pentane.pdb  
1      piperine.pdb  
1      propane.pdb  
1      pyridoxal.pdb  
1      quinine.pdb  
1      strychnine.pdb  
1      styrene.pdb  
1      sucrose.pdb  
1      testosterone.pdb  
1      thiamine.pdb  
1      tnt.pdb  
1      tuberin.pdb  
1      tyrian-purple.pdb  
1      vanillin.pdb  
1      vinyl-chloride.pdb  
1      vitamin-a.pdb
```