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得分：29/30

Assignment 05

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```
[ese-zhuhy@login02 ~]$ ln -s data_demo data_demo_link
[ese-zhuhy@login02 ~]$ ls
data_demo  data_demo_link  exam
[ese-zhuhy@login02 ~]$ echo $USER      echo $HOME , -1
ese-zhuhy
[ese-zhuhy@login02 ~]$ cd data_demo/molecules/
[ese-zhuhy@login02 molecules]$ touch test.pdb
[ese-zhuhy@login02 molecules]$ ls
cubane.pdb  ethane.pdb  methane.pdb  octane.pdb  pentane.pdb  propane.pdb  test.pdb
[ese-zhuhy@login02 molecules]$
```

```
[ese-zhuhy@login02 ~]$ cd data_demo
data_demo/      data_demo_link/
[ese-zhuhy@login02 ~]$ cd data_demo/
creatures/      molecules/      writing/
data/           north-pacific-gyre/  writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/data/elements/
[ese-zhuhy@login02 elements]$ ls -l |grep "^-"|wc -l
103
[ese-zhuhy@login02 elements]$ cd
[ese-zhuhy@login02 ~]$ cd
data_demo/      data_demo_link/  exam/      .local/      .ssh/
[ese-zhuhy@login02 ~]$ cd data_demo/
creatures/      molecules/      writing/
data/           north-pacific-gyre/  writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/data/
animal-counts/  elements/      pdb/
[ese-zhuhy@login02 ~]$ cd data_demo/data/pdb/
[ese-zhuhy@login02 pdb]$ diff -c ethane.pdb ethanol.pdb
*** ethane.pdb  2021-11-24 19:21:39.000000000 +0800
--- ethanol.pdb 2021-11-24 19:21:39.000000000 +0800
*****
*** 1,12 ****
! 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
! END
--- 1,13 ----
! 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
! END
[ese-zhuhy@login02 pdb]$
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[ese-zhuhy@login02 ~]$ cd data_demo/
creatures/      molecules/      writing/
data/           north-pacific-gyre/ writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/writing/data/
[ese-zhuhy@login02 data]$ grep -rn 'But she'*
LittleWomen.txt:1808:"Oh, bless you, no! But she let old Belsham rest, and when I ran back
LittleWomen.txt:2746:small quaver in her voice, "I came to thank you, sir, for..." But she
LittleWomen.txt:3635:than she went. But she begged so hard, and Sallie had promised to take
LittleWomen.txt:4535: But she does not hunt as our darling did,
LittleWomen.txt:4540: But she only spits at the dogs our pet
LittleWomen.txt:4544: But she is not fair to see,
LittleWomen.txt:4879:queer thing for her to do, she doesn't act a bit like herself. But she
LittleWomen.txt:13203:aspirant for fame, with philosophic composure. But she made a wry face
LittleWomen.txt:14085:her. But she can pet and comfort him after I'm gone, and so cure him
LittleWomen.txt:15723:to see signs of hope in the faint color on Beth's cheeks. But she
LittleWomen.txt:16081:But she did not get it, for though he joined her and answered all her
LittleWomen.txt:16912:sketchbook. But she tucked it under her arm with a sharp...
LittleWomen.txt:17939:Amy did any of these fond and foolish things. But she certainly did
LittleWomen.txt:19071:But she did show something better than brilliancy or skill, for she
LittleWomen.txt:19091:grasshopper. But she would have consented if he had proposed to sing a
[ese-zhuhy@login02 data]$ cd
[ese-zhuhy@login02 ~]$ cd data_demo/
creatures/      molecules/      writing/
data/           north-pacific-gyre/ writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/writing
writing/      writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/writing/
[ese-zhuhy@login02 writing]$ du -h
512      ./tools/old
2.0K     ./tools
1.3M     ./data
512      ./thesis
1.3M     .
[ese-zhuhy@login02 writing]$

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[ese-zhuhy@login02 writing]$ cd
[ese-zhuhy@login02 ~]$ cd data_demo/
[ese-zhuhy@login02 data_demo]$ cp -r writing/ writing_new
[ese-zhuhy@login02 data_demo]$ ls
creatures data molecules north-pacific-gyre notes pizza.cfg solar.pdf writing writing_new writing_new.zip

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[ese-zhuhy@login02 data_demo]$ zip -r writing_new.zip ./*
updating: creatures/ (stored 0%)
updating: creatures/basilisk.dat (deflated 59%)
updating: creatures/minotaur.dat (deflated 58%)
updating: creatures/unicorn.dat (deflated 63%)
updating: data/ (stored 0%)
updating: data/amino-acids.txt (deflated 42%)
updating: data/pdb/ (stored 0%)
updating: data/pdb/lanoxin.pdb (deflated 76%)
updating: data/pdb/methanol.pdb (deflated 63%)
updating: data/pdb/citronellal.pdb (deflated 71%)
updating: data/pdb/norethindrone.pdb (deflated 73%)
updating: data/pdb/heme.pdb (deflated 74%)
updating: data/pdb/mustard.pdb (deflated 72%)
updating: data/pdb/ammonia.pdb (deflated 57%)
updating: data/pdb/ascorbic-acid.pdb (deflated 73%)
updating: data/pdb/lactic-acid.pdb (deflated 73%)
updating: data/pdb/methane.pdb (deflated 66%)
updating: data/pdb/morphine.pdb (deflated 72%)
updating: data/pdb/piperine.pdb (deflated 71%)
updating: data/pdb/maltose.pdb (deflated 73%)
updating: data/pdb/testosterone.pdb (deflated 73%)
updating: data/pdb/thiamine.pdb (deflated 72%)
updating: data/pdb/quinine.pdb (deflated 77%)
updating: data/pdb/tyrian-purple.pdb (deflated 75%)
updating: data/pdb/tuberin.pdb (deflated 76%)
updating: data/pdb/cinnamaldehyde.pdb (deflated 69%)
updating: data/pdb/vitamin-a.pdb (deflated 74%)
updating: data/pdb/ethylcyclohexane.pdb (deflated 73%)
updating: data/pdb/strychnine.pdb (deflated 73%)
updating: data/pdb/sucrose.pdb (deflated 73%)

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[ese-zhuhy@login02 data_demo]$ unzip -o writing_new.zip
Archive:  writing_new.zip
  inflating: creatures/basilisk.dat
  inflating: creatures/minotaur.dat
  inflating: creatures/unicorn.dat
  inflating: data/amino-acids.txt
  inflating: data/pdb/lanoxin.pdb
  inflating: data/pdb/methanol.pdb
  inflating: data/pdb/citronellal.pdb
  inflating: data/pdb/norethindrone.pdb
  inflating: data/pdb/heme.pdb
  inflating: data/pdb/mustard.pdb
  inflating: data/pdb/ammonia.pdb
  inflating: data/pdb/ascorbic-acid.pdb
  inflating: data/pdb/lactic-acid.pdb
  inflating: data/pdb/methane.pdb
  inflating: data/pdb/morphine.pdb
  inflating: data/pdb/piperine.pdb
  inflating: data/pdb/maltose.pdb
  inflating: data/pdb/testosterone.pdb
  inflating: data/pdb/thiamine.pdb
  inflating: data/pdb/quinine.pdb
  inflating: data/pdb/tyrian-purple.pdb
  inflating: data/pdb/tuberin.pdb
  inflating: data/pdb/cinnamaldehyde.pdb
  inflating: data/pdb/vitamin-a.pdb
  inflating: data/pdb/ethylcyclohexane.pdb
  inflating: data/pdb/strychnine.pdb
  inflating: data/pdb/sucrose.pdb
  inflating: data/pdb/pentane.pdb
  inflating: data/pdb/nerol.pdb
  inflating: data/pdb/vinyl-chloride.pdb
  inflating: data/pdb/camphene.pdb
  inflating: data/pdb/aldrin.pdb
  inflating: data/pdb/cubane.pdb
  inflating: data/pdb/ethanol.pdb
  inflating: data/pdb/cholesterol.pdb
  inflating: data/pdb/cyclobutane.pdb

[ese-zhuhy@login02 data_demo]$ chmod 750 writing_new
[ese-zhuhy@login02 data_demo]$ ls
creatures  data  molecules  north-pacific-gyre  notes  pizza.cfg  solar.pdf  writing  writing_new  writing_new.zip
[ese-zhuhy@login02 data_demo]$ history 10
25  du -h
26  cd
27  cd data_demo/
28  cp -r writing/ writing_new
29  ls
30  zip -r writing_new.zip ./
31  unzip -o writing_new.zip
32  chmod 750 writing_new
33  ls
34  history 10
[ese-zhuhy@login02 data_demo]$

```

第二题需要计算文件内所有文件的大小，采用的命令是 du,用一个 bash 脚本来实行。

for pdb in *.pdb

do du -b

\$pdb

Done

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[ese-zhuhy@login02 ~]$ cd data_demo/
creatures/          molecules/          writing/
data/               north-pacific-gyre/ writing_new/
[ese-zhuhy@login02 ~]$ cd data_demo/data/pdb/
[ese-zhuhy@login02 pdb]$ ls
aldrin.pdb          cubane.pdb          lactic-acid.pdb    mint.pdb           pyridoxal.pdb      tyrian-purple.pdb
ammonia.pdb         cyclobutane.pdb     lactose.pdb        morphine.pdb       quinine.pdb        vanillin.pdb
ascorbic-acid.pdb   cyclohexanol.pdb    lanoxin.pdb        mustard.pdb        strychnine.pdb     vinyl-chloride.pdb
benzaldehyde.pdb    cyclopropane.pdb    loop.sh            nerol.pdb          styrene.pdb        vitamin-a.pdb
camphene.pdb        ethane.pdb          lsd.pdb            norethindrone.pdb sucrose.pdb
cholesterol.pdb     ethanol.pdb         maltose.pdb        octane.pdb         testosterone.pdb
cinnamaldehyde.pdb ethylcyclohexane.pdb menthol.pdb        pentane.pdb        thiamine.pdb
citronellal.pdb     glycol.pdb          methane.pdb        piperine.pdb       tnt.pdb
codeine.pdb         heme.pdb            methanol.pdb       propane.pdb        tuberin.pdb
[ese-zhuhy@login02 pdb]$ chmod 750 l
lactic-acid.pdb lactose.pdb lanoxin.pdb loop.sh lsd.pdb
[ese-zhuhy@login02 pdb]$ chmod 750 loop.sh
[ese-zhuhy@login02 pdb]$ ./loop.sh
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

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