ELECENG 3EY4: Electrical System Integration Project

Lab01_Linux Commands

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Step 1-4

```
Loading...

Welcome to Fedora 33 (riscv64)

[root@localhost ~]# mkdir home_wangj430
[root@localhost ~]# ls
bench.py    hello.c    home_wangj430
[root@localhost ~]# ls -a
.        .bash_logout      .bashrc      .cshrc          hello.c        .
..       .bash_profile     bench.py     .fldev_cfg      home_wangj430
[root@localhost ~]# cd home_wangj430
[root@localhost home_wangj430]# mkdir wangj430_folderA
[root@localhost home_wangj430]# mkdir wangj430_folderB
[root@localhost home_wangj430]# mkdir wangj430_backup
[root@localhost home_wangj430]# ls
wangj430_backup    wangj430_folderA    wangj430_folderB
[root@localhost home_wangj430]#
```

Step 6-8

```
[root@localhost ~]# cat MyCalendar.txt

March
August
July
February
October
May
September
June
April

[root@localhost ~]# cat MyFamily.txt

Brandon
Sandra
Peter
Jennifer
Graham

[root@localhost ~]# cat MyDailySteps.txt

5000
1800
17000
560
900
```

```
[root@localhost ~]# cat MyToDoList.txt

I make my bed in the morning
I eat pancakes for breakfast
I finish my homework in the evening
I go to dinner later in the evening

[root@localhost ~]#
```

Step 9-11

```
[root@localhost ~]#
[root@localhost ~]# cd home_wangj430/wangj430_backup
[root@localhost wangj430_backup]# python
Python 3.9.0 (default, Nov 26 2020, 00:00:00)
[GCC 10.2.1 20201016 (Red Hat 10.2.1-6)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
[root@localhost wangj430_backup]# nano calculation.py
```

```
[root@localhost wangj430_backup]#
[root@localhost wangj430_backup]# nano MyInfo.py
```

```
[root@localhost wangj430_backup]# python calculation.py
1st number is:1
2nd number is:2
3
[root@localhost wangj430_backup]# python MyInfo.py
Hi, my name is Junbo Wang
I am in my third year of Electrical Engineering
My student number is 400249823
My MacID is wangj430
[root@localhost wangj430_backup]#
```

calculation.py

```
  GNU   nano   5.3
Number1=int(input("1st   number   is:"))
Number2=int(input("2nd   number   is:"))
print(Number1+Number2)
```

MyInfo.py

```
  GNU   nano   5.3                                    MyInfo.py
print("Hi,   my   name   is   Junbo   Wang")
print("I   am   in   my   third   year   of   Electrical   Engineering")
print("My   student   number   is   400249823")
print("My   MacID   is   wangj430")
```

Step 12-17

```
[root@localhost   wangj430_backup]#   cd   ..
[root@localhost   home_wangj430]#   mv   wangj430_folderA   wangj430_textfiles
[root@localhost   home_wangj430]#   ls
wangj430_backup     wangj430_folderB     wangj430_textfiles
[root@localhost   home_wangj430]#   cd..
sh:   cd..:   command   not   found
[root@localhost   home_wangj430]#   cd   ..
[root@localhost   ~]#   mv   *.txt   home_wangj430/wangj430_textfiles
[root@localhost   ~]#   ls   home_wangj430/wangj430_textfiles
MyCalendar.txt     MyDailySteps.txt     MyFamily.txt     MyToDoList.txt
```

```
[root@localhost   home_wangj430]#  cd  ..
[root@localhost   ~]#  mv  *.txt   home_wangj430/wangj430_textfiles
[root@localhost   ~]#  ls  home_wangj430/wangj430_textfiles
MyCalendar.txt    MyDailySteps.txt     MyFamily.txt     MyToDoList.txt
[root@localhost   ~]#
[root@localhost   ~]#  cd  home_wangj430/wangj430_backup
[root@localhost   wangj430_backup]#  mv  calculation.py  calculation_2#s.py
[root@localhost   wangj430_backup]#  ls
calculation_2#s.py     MyInfo.py
[root@localhost   wangj430_backup]#  cd  ..
[root@localhost   home_wangj430]#  mv  wangj430_folderB  wangj430_pythonfiles
[root@localhost   home_wangj430]#  ls
wangj430_backup     wangj430_pythonfiles     wangj430_textfiles
[root@localhost   home_wangj430]#  cd  wangj430_backup
[root@localhost   wangj430_backup]#  mv  *.py  ../wangj430_pythonfiles
[root@localhost   wangj430_backup]#  ls  ../wangj430_pythonfiles
calculation_2#s.py     MyInfo.py
```

Step 18-22

```
[root@localhost   wangj430_backup]#  touch   Junbo_Wang
[root@localhost   wangj430_backup]#  touch   wangj430_FileX
[root@localhost   wangj430_backup]#  touch   wangj430_FileY
[root@localhost   wangj430_backup]#  cp  wangj430_FileY  Junbo_Wang
[root@localhost   wangj430_backup]#  cp  Junbo_Wang  ~/home_wangj430
[root@localhost   wangj430_backup]#  cp  wangj430_FileX  ~/home_wangj430
[root@localhost   wangj430_backup]#  cd  ~
[root@localhost   ~]#  cd  home_wangj430
[root@localhost   home_wangj430]#  rm  -r  wangj430_backup
[root@localhost   home_wangj430]#  ls
Junbo_Wang     wangj430_FileX     wangj430_pythonfiles     wangj430_textfiles
```

Step 23-27

```
[root@localhost  home_wangj430]#  cd  wangj430_textfiles
[root@localhost  wangj430_textfiles]#  sort  -M  MyCalendar.txt


February
March
April
May
June
July
August
September
October
```

```
[root@localhost  wangj430_textfiles]#
[root@localhost  wangj430_textfiles]#  sort  -r  MyFamily.txt
Sandra
Peter
Jennifer
Graham
Brandon
```

```
[root@localhost  wangj430_textfiles]#  sort  MyFamily.txt>MyFamily_alphaOrder.txt
[root@localhost  wangj430_textfiles]#  ls
MyCalendar.txt    MyDailySteps.txt    MyFamily_alphaOrder.txt    MyFamily.txt    MyToDoList.txt
[root@localhost  wangj430_textfiles]#  cat  MyFamily_alphsOrder.txt
cat:  MyFamily_alphsOrder.txt:  No  such  file  or  directory
[root@localhost  wangj430_textfiles]#  cat  MyFamily_alphaOrder.txt


Brandon
Graham
Jennifer
Peter
Sandra
```

```
[root@localhost  wangj430_textfiles]#  rm  MyFamily.txt
[root@localhost  wangj430_textfiles]#  ls
MyCalendar.txt    MyDailySteps.txt    MyFamily_alphaOrder.txt    MyToDoList.txt
[root@localhost  wangj430_textfiles]#  sort  -n  MyDailySteps.txt


560
900
1800
5000
17000
```

Step 28-32


```
[root@localhost  wangj430_textfiles]#  cd  ~
[root@localhost  ~]#  pwd
/root
[root@localhost  ~]#  find  ~  -name  "*.txt*"
/root/home_wangj430/wangj430_textfiles/MyCalendar.txt
/root/home_wangj430/wangj430_textfiles/MyDailySteps.txt
/root/home_wangj430/wangj430_textfiles/MyToDoList.txt
/root/home_wangj430/wangj430_textfiles/MyFamily_alphaOrder.txt
[root@localhost  ~]#  find  ~  -name  "*.py*"
/root/bench.py
/root/home_wangj430/wangj430_pythonfiles/calculation_2#s.py
/root/home_wangj430/wangj430_pythonfiles/MyInfo.py
/root/.python_history
```



```
[root@localhost  ~]#  grep  -r  Sandra  ~
/root/home_wangj430/wangj430_textfiles/MyFamily_alphaOrder.txt:Sandra
[root@localhost  ~]#  grep  -r  my  ~
/root/home_wangj430/wangj430_textfiles/MyToDoList.txt:I  make  my  bed  in  the  morning
/root/home_wangj430/wangj430_textfiles/MyToDoList.txt:I  finish  my  homework  in  the  evening
/root/home_wangj430/wangj430_pythonfiles/MyInfo.py:print("Hi,  my  name  is  Junbo  Wang")
/root/home_wangj430/wangj430_pythonfiles/MyInfo.py:print("I  am  in  my  third  year  of  Electrical  Engineering")
[root@localhost  ~]#  grep  -r  evening  ~
/root/home_wangj430/wangj430_textfiles/MyToDoList.txt:I  finish  my  homework  in  the  evening
/root/home_wangj430/wangj430_textfiles/MyToDoList.txt:I  go  to  dinner  later  in  the  evening
```

Sandra: 1 time

My: 4 times

Evening: 2 times