

Lab01 – Linux Commands

ELEC ENG 3EY4

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L04

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As a future member of the engineering profession, the student is responsible for performing the required work in an honest manner, without plagiarism and cheating. Submitting this work with my name and student number is a statement and understanding that this work is my own and adheres to the Academic Integrity Policy of McMaster University and the Code of Conduct of the Professional Engineers of Ontario. Submitted by [**Brent Menheere, menheerb, 400362843**]

Steps 1-4:

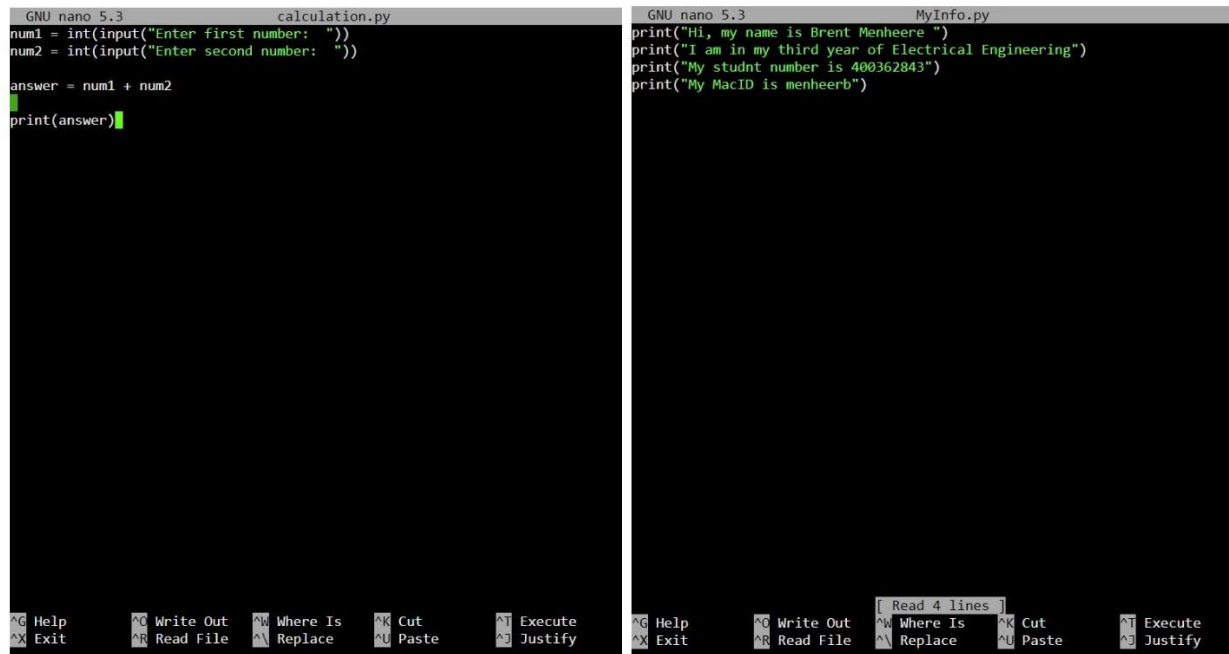
```
[root@localhost ~]# cd /
[root@localhost /]# mkdir home_menheerb
[root@localhost /]# ls
bin  dev  home  lib  lost+found  mnt  proc  run  srv  tmp  var
boot  etc  home_menheerb  lib64  media  opt  root  sbin  sys  usr
[root@localhost /]# ls -a
.  boot  etc  home_menheerb  lost+found  opt  root  srv  usr
.cache  .fscmd  lib  media  .preload2  run  sys  var
bin  dev  home  lib64  mnt  proc  sbin  tmp  .viminfo
[root@localhost /]# cd home_menheerb
[root@localhost home_menheerb]# mkdir menheerb_folderA
[root@localhost home_menheerb]# mkdir menheerb_folderB
[root@localhost home_menheerb]# mkdir menheerb_backup
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_folderA  menheerb_folderB
[root@localhost home_menheerb]#
```

Step 7:

```
[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 diner later in the evening
[root@localhost /]#
```

Python Codes: calculation.py and MyInfo.py



```
GNU nano 5.3 calculation.py
num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))
answer = num1 + num2
print(answer)
```

```
GNU nano 5.3 MyInfo.py
print("Hi, my name is Brent Menheere ")
print("I am in my third year of Electrical Engineering")
print("My studnt number is 400362843")
print("My MacID is menheerb")
```

Step 10:

```
[root@localhost menheerb_backup]# python3.9 calculation.py
Enter first number: 2
Enter second number: 4
6
[root@localhost menheerb_backup]# python3.9 MyInfo.py
Hi, my name is Brent Menheere
I am in my third year of Electrical Engineering
My studnt number is 400362843
My MacID is menheerb
[root@localhost menheerb_backup]#
```

Steps 12-16:

```
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_folderA  menheerb_folderB
[root@localhost home_menheerb]# mv menheerb_folderA menheerb_textfiles
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_folderB  menheerb_textfiles
[root@localhost home_menheerb]# cd ..
[root@localhost /]# ls
bin    home    lost+found    MyDailySteps.txt  proc  srv  var
boot   home_menheerb  media        MyFamily.txt      root  sys
dev    lib      mnt          MyToDoList.txt    run   tmp
etc    lib64    MyCalendar.txt  opt                sbin  usr
[root@localhost /]# mv *.txt home_menheerb/menheerb_textfiles
[root@localhost /]# ls
bin    dev    home    lib    lost+found  mnt  proc  run  srv  tmp  var
boot   etc    home_menheerb  lib64  media      opt  root  sbin  sys  usr
[root@localhost /]# cd home_menheerb/menheerb_textfiles
[root@localhost menheerb_textfiles]# ls
MyCalendar.txt  MyDailySteps.txt  MyFamily.txt  MyToDoList.txt
[root@localhost menheerb_textfiles]#
```

Figure 1 Step 12-13

```
[root@localhost menheerb_backup]# ls
calculation.py  MyInfo.py
[root@localhost menheerb_backup]# mv calculation.py calculation_2#s.py
[root@localhost menheerb_backup]# ls
calculation_2#s.py  MyInfo.py
```

Figure 2 Step 14

```
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_folderA  menheerb_folderB
[root@localhost home_menheerb]# mv menheerb_folderB menheerb_pythonfiles
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_folderA  menheerb_pythonfiles
[root@localhost home_menheerb]#
```

Figure 3 Step 15

```
[root@localhost home_menheerb]# mv menheerb_backup/*.py menheerb_pythonfiles
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# menheerb_pythonfiles
sh: menheerb_pythonfiles: command not found
[root@localhost home_menheerb]# cd menheerb_pythonfiles
[root@localhost menheerb_pythonfiles]# ls
calculation_2#s.py  MyInfo.py
```

Figure 4 Step 16

Steps 18-21 (Some trial and error takes place within this code, however all goals are achieved):

```
[root@localhost menheerb_backup]# ls
[root@localhost menheerb_backup]# touch Brent_Menheere
[root@localhost menheerb_backup]# touch menheerb_FileX
[root@localhost menheerb_backup]# touch menheerb_FileY
[root@localhost menheerb_backup]# ls
Brent_Menheere  menheerb_FileX  menheerb_FileY
[root@localhost menheerb_backup]# cp menheerb_FileY Brent_Menheere
[root@localhost menheerb_backup]# ls
Brent_Menheere  menheerb_FileX  menheerb_FileY
[root@localhost menheerb_backup]# cp Brent_Menheere home_menheerb
[root@localhost menheerb_backup]# cp menheerb_FileX home_menheerb
[root@localhost menheerb_backup]# cd ..
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# cp menheerb_backup/Brent_Menheere home_menheerb
cp: cannot stat 'menheerb_backup/menheerb_FileX': No such file or directory
[root@localhost home_menheerb]# cp menheerb_backup/menheerb_FileX home_menheerb
cp: cannot stat 'menheerb_backup/menheerb_FileX': No such file or directory
[root@localhost home_menheerb]# ls
home_menheerb  menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# ls
home_menheerb  menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# cd menheerb_backup
[root@localhost menheerb_backup]# ls
Brent_Menheere  home_menheerb  menheerb_FileX  menheerb_FileY
[root@localhost menheerb_backup]# cd ..
[root@localhost home_menheerb]# cp menheerb_backup/menheerb_FileX home_menheerb
cp: cannot stat 'menheerb_backup/menheerb_FileX': No such file or directory
[root@localhost home_menheerb]# ls
home_menheerb  menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# rm home_menheerb
[root@localhost home_menheerb]# ls
menheerb_backup  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# cd menheerb_backup
[root@localhost menheerb_backup]# cp Brent_Menheere /home_menheerb
[root@localhost menheerb_backup]# cp menheerb_FileX /home_menheerb
[root@localhost menheerb_backup]# cd ..
```

```
[root@localhost menheerb_backup]# cd ..
[root@localhost home_menheerb]# ls
Brent_Menheere  menheerb_backup  menheerb_FileX  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]# rm -r menheerb_backup
[root@localhost home_menheerb]# ls
Brent_Menheere  menheerb_FileX  menheerb_pythonfiles  menheerb_textfiles
[root@localhost home_menheerb]#
```

Steps 23-26:

```
[root@localhost menheerb_textfiles]# ls
MyCalendar.txt  MyDailySteps.txt  MyFamily.txt  MyToDoList.txt
[root@localhost menheerb_textfiles]# sort -M MyCalendar.txt
February
March
April
May
June
July
August
September
October
[root@localhost menheerb_textfiles]# sort -r MyFamily.txt
Sandra
Peter
Jennifer
Graham
Brandon
```

```
[root@localhost menheerb_textfiles]# sort MyFamily.txt > MyFamily_alphaOrder.txt
[root@localhost menheerb_textfiles]# cat MyFamily_alphaOrder.txt
Brandon
Graham
Jennifer
Peter
Sandra
[root@localhost menheerb_textfiles]# ls
MyCalendar.txt  MyDailySteps.txt  MyFamily_alphaOrder.txt  MyFamily.txt  MyToDoList.txt
[root@localhost menheerb_textfiles]# rm MyFamily.txt
[root@localhost menheerb_textfiles]# ls
MyCalendar.txt  MyDailySteps.txt  MyFamily_alphaOrder.txt  MyToDoList.txt
[root@localhost menheerb_textfiles]# sort -n MyDailySteps.txt
560
900
1800
5000
17000
[root@localhost menheerb_textfiles]#
```


Steps 28-31:

```
[root@localhost menheerb_textfiles]# cd /
[root@localhost /]# ls
bin  dev  home  lib  lost+found  mnt  proc  run  srv  tmp  var
boot  etc  home_menheerb  lib64  media  opt  root  sbin  sys  usr
[root@localhost /]# cd home_menheerb
[root@localhost home_menheerb]# find -name "*.txt"
./menheerb_textfiles/MyCalendar.txt
./menheerb_textfiles/MyDailySteps.txt
./menheerb_textfiles/MyToDoList.txt
./menheerb_textfiles/MyFamily_alphaOrder.txt
[root@localhost home_menheerb]# find -name "*.py"
./menheerb_pythonfiles/calculation_2s.py
./menheerb_pythonfiles/MyInfo.py
[root@localhost home_menheerb]# grep -r Sandra
menheerb_textfiles/MyFamily_alphaOrder.txt:Sandra
[root@localhost home_menheerb]# grep -r my
menheerb_textfiles/MyToDoList.txt:I make my bed in the morning
menheerb_textfiles/MyToDoList.txt:I finish my homework in the evening
menheerb_pythonfiles/MyInfo.py:print("Hi, my name is Brent Menheere ")
menheerb_pythonfiles/MyInfo.py:print("I am in my third year of Electrical Engineering")
[root@localhost home_menheerb]# grep -r evening
menheerb_textfiles/MyToDoList.txt:I finish my homework in the evening
menheerb_textfiles/MyToDoList.txt:I go to dinner later in the evening
[root@localhost home_menheerb]#
```

Word Counts:

Sandra – 1

my – 4 (Please note, the Lab manual specifies “my” with lowercase letters, thus this count is specifically for “my” and does not include “My”)

evening - 2

