~$ find /home -newermt "-10 minutes"

/home/user

/home/user/file1.term

/home/user/.file1.term-0.term

/home/user/.snapshots

/home/user/.snapshots/2022-10-12-104118

/home/user/.snapshots/2022-10-12-165147

/home/user/.snapshots/2022-10-13-062612

/home/user/.snapshots/2022-10-13-065915

/home/user/.snapshots/2022-10-13-065915/file1.term

/home/user/.snapshots/2022-10-13-065915/.file1.term-0.term

/home/user/.snapshots/2022-10-13-065915/.bash\_history

/home/user/.snapshots/2022-10-12-161644

/home/user/.snapshots/2022-10-12-142212

/home/user/.snapshots/2022-10-12-100925

/home/user/.bash\_history

10. Ls -a (hidden file show karne ke liye hai)

Iska code kya hai 10th ka???? Yeh highlighted walla hai bus

Itna hi hai kya? han

Okkkkkkkk

Thanks

9. Walla mam ne mana kiya tha toh nhi kiya!

Abhi dikhunga iska bhi

///////////////////////////////////// yeh hai ans ////////////////////////////////////

~$ touch .adminAccount

~$ cat > .adminAccount

admin@ethnus.com

AdminPassword

**Question 9 ka ans hai yeh Assignment 2 okk thanks**

**Abhi 3rd ki 8 se 14 bache hai bas**

**or assignment 1 ho gya pura?**

**hein?**

**Nahi, hua hai na 1st complete → mene 1 se 10 tak hi kiye hain bus :)**

**Ruk me dekhta hu ek min**

**Abhi only 3rd dekh me bhi dekhta hu side by side 8 to 14**

**Meri 1st assessment ok!!!**

Task : Unix Assignment no 1

**Solution:**

**1. Create a file using touch command:-**

~$ touch DATA

**2.Understand the inode, access time & modification time of a file using stat:-**

~$ stat Linux.term

File: Linux.term

Size: 0 Blocks: 1 IO Block: 131072

regular empty file

Device: 10001eh/1048606d Inode: 386 Links: 1

Access: (0644/-rw-r--r--) Uid: ( 2001/ user) Gid: ( 2001/ user)

Access: 2022-10-12 16:07:26.524342393 +0000

Modify: 2022-10-12 16:07:26.524342393 +0000

Change: 2022-10-12 16:07:26.524342393 +0000

**3.Using date command:-**

~$ date

Wed Oct 12 16:08:05 UTC 2022

~$ date -u

Wed Oct 12 16:09:21 UTC 2022

~$ date --date="yesterday"

Tue Oct 11 16:10:25 UTC 2022

**4.Create two or more files and understand inode:-**

~$ touch f1

~$ touch f2

~$ stat f1

File: f1

Size: 0 Blocks: 1 IO Block: 131072 regular empty file

Device: 10001eh/1048606d Inode: 388 Links: 1

Access: (0644/-rw-r--r--) Uid: ( 2001/ user) Gid: ( 2001/ user)

Access: 2022-10-12 16:10:44.400194214 +0000

Modify: 2022-10-12 16:10:44.400194214 +0000

Change: 2022-10-12 16:10:44.400194214 +0000

~$ stat f2

File: f2

Size: 0 Blocks: 1 IO Block: 131072 regular empty file

Device: 10001eh/1048606d Inode: 262 Links: 1

Access: (0644/-rw-r--r--) Uid: ( 2001/ user) Gid: ( 2001/ user)

Access: 2022-10-12 16:10:48.572612810 +0000

Modify: 2022-10-12 16:10:48.572612810 +0000

Change: 2022-10-12 16:10:48.572612810 +0000

**5.Add contents to the file using cat command**

~$ cat>Data

Hi my team members

~$ cat>f1

How are you?

^Z

[1]+ Stopped

^Z

[1]+ Stopped

cat > f1

**6.Understand the inode, block, access time & modification time of a file using gh:-**

~/ws# stat f

  File: f

  Size: 18              Blocks: 8          IO Block: 4096   regular file

Device: eh/14d  Inode: 68707       Links: 1

Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 16:48:40.000000000

Modify: 2022-10-12 16:48:40.000000000

Change: 2022-10-12 16:48:33.000000000

**7.List the files in current directory using ls command:-**

~/ws# ls

a.txt  b.txt  f

**8.Copy the content of file1 to another file using cp:-**

~/ws# cp a.txt f

~/ws# cat f

This is A file data.

**9.Understand the difference between cp & mv:-**

~/ws# cp a.txt f

~/ws# cat f

This is A file data.

~/ws# mv a.txt f

~/ws# cat f

This is A file data.

~/ws# ls

b.txt  f

**10.Delete the copy of the file using rm:-**

~/ws# rm b.txt

~/ws# ls

f

**11.Create hard link & soft link for a file using ln command:-**

a.Create a file "data.txt" with content "data.txt"

~/ws# cat > data.txt

data.txt

~/ws#

~/ws# cat data.txt

data.txt

B.Create a hard link for "data.txt" & name it as "dataLink.txt"

~/ws# ln data.txt dataLink.txt

~/ws# ls

a             data.txt      hello.txt

d             dataLink.txt  s

C.Understand the inode of the links created

~/ws# stat dataLink.txt

  File: dataLink.txt

  Size: 9               Blocks: 8          IO Block: 4096   regular file

Device: eh/14d  Inode: 68702       Links: 2

Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:15:15.000000000

Modify: 2022-10-12 17:15:15.000000000

Change: 2022-10-12 17:15:11.000000000

D.Change the content of "dataLink.txt" to "dataLink.txt"

~# cat > dataLink.txt

datalink.txt

~# cat dataLink.txt

datalink.txt

E.Understand the inode of the links created

~# stat dataLink.txt

  File: dataLink.txt

  Size: 13              Blocks: 8          IO Block: 4096   regular file

Device: eh/14d  Inode: 68703       Links: 1

Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:19:57.000000000

Modify: 2022-10-12 17:19:57.000000000

Change: 2022-10-12 17:19:44.000000000

F.Check the content of "data.txt" & "dataLink.txt"

~# cat data.txt

data.txt

DataLink.txt

~# cat dataLink.txt

data.txt

DataLink.txt

G.Delete "data.txt" & check the content of "dataLink.txt

~# rm data.txt

~# cat dataLink.txt

data.txt

DataLink.txt

H.Create a soft link for "dataLink.txt" & name it as "dataSoft.txt"

~# ln -s dataLink.txt dataSoft.txt

~# ls

bench.py      dataSoft.txt  hello.js      ws

dataLink.txt  hello.c       readme.txt

I.Understand the inode of the links created

~# stat dataLink.txt

  File: dataLink.txt

  Size: 22              Blocks: 8          IO Block: 4096   regular file

Device: eh/14d  Inode: 68704       Links: 1

Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:23:40.000000000

Modify: 2022-10-12 17:23:40.000000000

Change: 2022-10-12 17:22:31.000000000

~# stat dataSoft.txt

  File: 'dataSoft.txt' -> 'dataLink.txt'

  Size: 12              Blocks: 8          IO Block: 4096   symbolic link

Device: eh/14d  Inode: 68705       Links: 1

Access: (0777/lrwxrwxrwx)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:26:14.000000000

Modify: 2022-10-12 17:26:14.000000000

Change: 2022-10-12 17:26:14.000000000

J.Change the content of "dataSoft.txt" to "dataSoft.txt"

~# cat >> dataSoft.txt

dataSoft.txt

~# cat dataSoft.txt

data.txt

DataLink.txt

dataSoft.txt

K.Understand the inode of the links created

~# stat dataLink.txt

  File: dataLink.txt

  Size: 35              Blocks: 8          IO Block: 4096   regular file

Device: eh/14d  Inode: 68704       Links: 1

Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:27:30.000000000

Modify: 2022-10-12 17:27:30.000000000

Change: 2022-10-12 17:22:31.000000000

~# stat dataSoft.txt

  File: 'dataSoft.txt' -> 'dataLink.txt'

  Size: 12              Blocks: 8          IO Block: 4096   symbolic link

Device: eh/14d  Inode: 68705       Links: 1

Access: (0777/lrwxrwxrwx)  Uid: (    0/    root)   Gid: (    0/    root)

Access: 2022-10-12 17:26:14.000000000

Modify: 2022-10-12 17:26:14.000000000

Change: 2022-10-12 17:26:14.000000000

L.Check the content of "data.txt" & "dataLink.txt"

~# cat dataLink.txt

data.txt

DataLink.txt

dataSoft.txt

~# cat dataSoft.txt

data.txt

DataLink.txt

dataSoft.txt

M.Delete "dataLink.txt" & check the content of "dataSoft.txt"

~# rm dataLink.txt

~# cat dataSoft.txt

cat: can't open 'dataSoft.txt': No such file or directory

**12.Create a directory Day01 & Day02 using mkdir:-**

~/ws# mkdir Day01 Day02

~/ws# ls

Day01  Day02  f

**13.Moving file1 to Day01 directory using mv:-**

~/ws# mv f Day01

~/ws# ls

Day01  Day02

~/ws# cd Day01

~/ws/Day01# ls

f

**14.Copy file1 from Day01 to Day02:-**

~/ws/Day01# cp f /root/ws/Day02

~/ws/Day01# cd ..

~/ws# cd Day02

~/ws/Day02# ls

f

**15.Remove directory Day02 using rmdir & rm:-**

~/ws/Day02# rm f

~/ws# rmdir Day02

~/ws# ls

Day01

**16.Understanding the directory structure using cd & pwd:-**

~/ws# cd Day01/

~/ws/Day01# pwd

/root/ws/Day01

**17.Understanding . & ..:-**

~/ws/Day01# cd .

~/ws/Day01# cd ..

**18.Add contents to the file using vim editor:-**

vi hello.txt

**19.Display the contents of a file using cat command:-**

~/ws# cat hello.txt

This is VI Editor

**20.Statistics on the content of the file using wc command:-**

A.Get number of characters stored in a file

~/ws# wc -c hello.txt

1. ello.txt

B.Get number of lines stored in a file

~/ws# wc -l hello.txt

1. hello.txt

C.Get number of words stored in a file

~/ws# wc -w hello.txt

hello.txt

**21Understanding df and du & difference between size of a file and size on disk:-**

~/ws# df -h

Filesystem                Size      Used Available Use% Mounted on

/dev/root                 4.9G      2.3G      2.6G  47% /

devtmpfs                 91.3M         0     91.3M   0% /dev

tmpfs                    91.4M      4.0K     91.4M   0% /run

none                     91.4M         0     91.4M   0% /dev/shm

~/ws# du -h

8.0K    .

**22.Understanding lsof command:-**

~/ws# lsof

1       /bin/busybox    /dev/console

1       /bin/busybox    /dev/console

1       /bin/busybox    /dev/console

1       /bin/busybox    /sbin/init

55      /usr/local/bin/settime  /dev/null

55      /usr/local/bin/settime  /dev/null

55      /usr/local/bin/settime  /dev/null

56      /sbin/dhcpcd    /dev/null

56      /sbin/dhcpcd    /dev/null

56      /sbin/dhcpcd    /dev/null

56      /sbin/dhcpcd    anon\_inode:[eventpoll]

56      /sbin/dhcpcd    /run/dhcpcd.pid

56      /sbin/dhcpcd    socket:[2930]

56      /sbin/dhcpcd    socket:[2932]

56      /sbin/dhcpcd    socket:[2936]

56      /sbin/dhcpcd    socket:[2937]

56      /sbin/dhcpcd    socket:[2938]

56      /sbin/dhcpcd    socket:[2961]

56      /sbin/dhcpcd    socket:[2963]

56      /sbin/dhcpcd    socket:[2964]

61      /bin/busybox    /dev/hvc0

61      /bin/busybox    /dev/hvc0

61      /bin/busybox    /dev/hvc0

61      /bin/busybox    /dev/tty

**End of 1st assessment**

**\*\*\*\*\*\*\*\*\*\*\*\***

**Tujhe lagega utha le yaha se**

**Bache huye try kar me bhi karta**

**acha ok thanks!!**

**If you get ans yehi update kR DENA ok sure!**

Task :- Unix assignment no3

**1.Get only the employee id of all employees from file “employees.txt”**

**~$ awk '{print $1}' employees.txt → yeh chal nhi raha mere code mein!!**

E1001

E1002

E1003

E1004

E1005

E1006

**2.Get the total number of employees**

~$ awk 'END { print NR }' employees.txt

**3.Mask employee mobiles numbers and change them with \***

$ sed -E 's|[0-9]{9}|\*\*\*\*\*\*\*\*\*\*|g' employees.txt

E1001 James FIN 50000 \*\*\*\*\*\*\*\*\*\*

E1002 Smith BD 73000 \*\*\*\*\*\*\*\*\*\*

E1003 Kelvin TECH 78000 \*\*\*\*\*\*\*\*\*\*

E1004 Raj TECH 145000 \*\*\*\*\*\*\*\*\*\*

E1005 Prem FIN 95000 \*\*\*\*\*\*\*\*\*\*

E1006 Guru BD 195000 \*\*\*\*\*\*\*\*\*\*

E1006 Guru BD 195000 \*\*\*\*\*\*\*\*\*\*

**4.Open employees.txt and write the following data. (if you do not have employees.txt ready)?**

**E1001:James:FIN:50000:987654371**

**E1002:Smith:BD:73000:987654381**

**E1003:Kevin:TECH:78000:987654341**

**E1004:Raj:TECH:145000:987654351**

**E1005:Prem:FIN:95000:987654321**

**E1006:Guru:BD:195000:987654311**

**E1006:Guru:BD:195000:987654311**

~$ cat > employees.txt

E1001 James FIN 50000 987654371

E1002 Smith BD 73000 987654381

E1003 Kelvin TECH 78000 987654341

E1004 Raj TECH 145000 987654351

E1005 Prem FIN 95000 987654321

E1006 Guru BD 195000 987654311

**5.Get the last used employee id**

$ tail -1 employees.txt

E1006 Guru BD 195000 987654311

**6.Get maximum salary earned by the employees**

sort -t'|' -k4nr employees.txt -r | head -1

**7.Hide duplicate rows from the employees.txt**

$ uniq employees.txt

E1001 James FIN 50000 987654371

E1002 Smith BD 73000 9876543**~$ chmod u+rwx employees.txt**81

E1003 Kelvin TECH 78000 987654341

E1004 Raj TECH 145000 987654351

E1005 Prem FIN 95000 987654321

E1006 Guru BD 195000 987654311

**8.   Change the permission of employees.txt to**

**a.       user = rwx**

**b.       group = rw- ~$ chmod g+rw- employees.txt**

**c.       others = r– ~$ chmod o+r-- employees.txt**

**Got it → ok**

**8 ka ans hai yeh**

**9.   Change the permission of employees.txt to**

**a.       user = r--**

**b.       group = ---**

**c.       others = —**

**Ans: ~$ chmod u-wx employees.txt**

**~$ chmod g-rw employees.txt**

**~$ chmod o-r employees.txt**

**Ek second**

**Command mein change hai rukja – ok**

**Okk ok**

**10.   Try cat >> employees.txt(ISKA ANS MILA HAI)**

~$ cat>employees.txt

~$ ls

EmployeeManagment employee.txt

**10,12 same hai mil gaye**

**13 bhi mila**

**11,14mile kya yehi baki hai ab**

**11 likh rahi hun dekho**

**= ok,14 baki hai alag alag ans mil rahe hai**

**11.   Change the permission of employees.txt to**

**a.       user = -w- ~$ chmod u-r+w employees.txt**

**b.       group = — iska no change**

**c.       others = — iska bhi no change**

**11 ka ans :**

**Yeh output hai -> -r-------- 1 user user 191 Oct 14 04:53 employees.txt**

**Ab code:**

**A,b,c ke samne hi likh diye ok!!**

**okkkkk**

**12.   Try cat employees.txt(ISKA BHI SAME HAI)**

~$ cat>employees.txt

~$ ls

EmployeeManagment employee.txt

**13.   Find all the open directories by the current logged in user**

~$**sudo lsof -au user -d cwd**

**14.   Find the identical files in the present working directory**

**Niche chek kar na han bohot sahi hai badiya!!!**

Ab dekh ji

Jobch gye dekh rahi hun me

ok

\*\*\*\*\*\* arre nyc !!!

**Assignment 4 :**

**Done : 1,2,3,4,5,6,7,8,9,10,11**

**Pending : 12,13**

**1. Open employees.txt and write the following data. (if you do not have employees.txt ready) E1001:James:FIN:50000:987654371**

**E1002:Smith:BD:73000:987654381**

**E1003:Kevin:TECH:78000:987654341**

**E1004:Raj:TECH:145000:987654351**

**E1005:Prem:FIN:95000:987654321**

**E1006:Guru:BD:195000:987654311**

**E1006:Guru:BD:195000:987654311**

**E1007:Ken::1:7894561230**

~$ cat > Employees.txt

This is a Employees file

I already have data so I haven't added new

**2. Remove the duplicates and store the output in processedEmployees.txt**

~$ uniq employees.txt

E1001:James:FIN:50000:987654371

E1002:Smith:BD:73000:987654381

E1003:Kevin:TECH:78000:987654341

E1004:Raj:TECH:145000:987654351

E1005:Prem:FIN:95000:987654321

E1006:Guru:BD:195000:987654311

E1007:Ken::1:7894561230

~$ cp employees.txt processedEmployees.txt yeh bhi add kar liyo

Han yeh next command hai kyuki output save karna hai!

**Okkk**

**3. Rename processedEmployees.txt to employees.txt**

~$ mv Employees.txt employees.txt

~$ ls -l

**4. Sort employees according to their salary and store the output in sortedEmployees.txt**

~$ sort -t ':' -k4n employees.txt

**5. Find the minimum earning employee in department FIN and store the output in specialEmployees.txt**

**~$ sort | awk '/FIN/ {print}' employees.txt | head -1**

**Storing output in specialEmployees.txt**

**~$ sort | awk '/FIN/ {print}' employees.txt | head -1 > specialEmployees.txt**

**~$ cat specialEmployees.txt**

**Sun yeh file kahin share mat karna coz bohot mehnat se dhund rahe hain or kar rahe hain!**

**Obv not ok!**

**Oyee Sunn assignment 3 me 14 wale ka mil gaya**

**~$#cp employees.txt file.txt**

**~$ ls employees.txt file.txt**

**~$ diff employees.txt file.txt**

**Ok !!**

**6. Find the maximum earning employee in department BD and append the output to specialEmployees.txt**

**~$ awk '/BD/ {print}' employees.txt | sort -nrk4 |head -1**

**~$ awk '/BD/ {print}' employees.txt | sort -nrk4 |head -1 >> specialEmployees.txt**

**~$ cat specialEmployees.txt**

**7. Find employees earning 6 digit salary and append the output to specialEmployees.txt**

**~$ awk '{if (length($4)==6) print $2}' employees.txt**

**~$ awk '{if (length($4)==6) print $2}' employees.txt >> specialEmployees.txt**

**~$ cat specialEmployees.txt**

**8. Remove the duplicates from specialEmployees.txt and store the output in processedEmployees.txt**

**~$ uniq specialEmployees.txt**

**E1001:James:FIN:50000:987654371**

**E1002:Smith:BD:73000:987654381**

**E1003:Kevin:TECH:78000:987654341**

**E1004:Raj:TECH:145000:987654351**

**E1005:Prem:FIN:95000:987654321**

**E1006:Guru:BD:195000:987654311**

**E1007:Ken::1:7894561230**

**~$ cp employees.txt processedEmployees.txt**

**9. Copy the contents of processedEmployees.txt to specialEmployees.txt and remove processedEmployees.txt**

**~$ cat processedEmployees.txt specialEmployees.txt > p.txt**

**~$ cat p.txt**

**~$ mv p.txt specialEmployees.txt**

**~$ rm processedEmployees.txt**

**Ab sahi hai!!**

**Okk**

**10.Find the files created yesterday**

~$ -newermt '2022-10-13'

~$ ls -lt

-r-----r-- 1 user user 190 Oct 13 10:25 employees.txt

**11.Find the files which are modified today**

~$ find . -type f -newermt 2022-10-14

~$ ls -lt

-r-----r-- 1 user user 190 Oct 14 12:18 employees.txt

**12.Remove employees who do not have department**

**Mile kya ans??**

**13.List employees from departments other than FIN**