Day 2 OS Lab_Notes Sanket Shalukar

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Redirection operators

> :Redirect output to a file

Ex: ls > abc.txt

>> Append output of a file

1. We can create a file using cat >test11.txt

And enter anything

```
kiran@CMKL-kiranw:~$ cat > test11.txt
Hello Rohini !

kiran@CMKL-kiranw:~$ cat test11.txt
Hello Rohini !
```

2. Use of Copy commend.

We can copy the content of a file to the another file using below commend.

```
kiran@CMKL-kiranw:~$ cat abc.txt
Hello Linux!

Hello Java !
Hello Python!
kiran@CMKL-kiranw:~$ cp abc.txt aaa.txt
kiran@CMKL-kiranw:~$ cat aaa.txt
Hello Linux!

Hello Java !
Hello Python!
```

```
/home/kiran
kiran@CMKL-kiranw:~$ cp file1.txt   test11.txt
kiran@CMKL-kiranw:~$ mv  abc.txt test12.txt
kiran@CMKL-kiranw:~$ ls
OS       aaa.txt  dir13  f2  f5         jh.txt     test      test1       test12.txt
aaa.c    cdac     dir2   f3  file       notes.txt  test.sh   test1.sh    user1
aaa.cpp  dir1     f1     f4  file1.txt  s1.sh      test.txt  test11.txt  user2
kiran@CMKL-kiranw:~$ cat test12.txt
Hello Linux!

Hello Java !
Hello Python!
kiran@CMKL-kiranw:~$
```

Questions for practice

1. Create a directory CDAC
2. Create DIR1 and DIR2
3. Create one file and add 20 lines in that

```
sanket@Thekulkarni:~$ mkdir CDAC
sanket@Thekulkarni:~$ cd CDAC
sanket@Thekulkarni:~/CDAC$ mkdir Dir1 Dir2
sanket@Thekulkarni:~/CDAC$ touch file1.txt
sanket@Thekulkarni:~/CDAC$ ls
Dir1  Dir2  file1.txt
sanket@Thekulkarni:~/CDAC$ cat > file.txt
Hello This is Sanket Thankyou!sanket@Thekulkarni:~/CDAC$ cat  file.txt
Hello This is Sanket Thankyou!sanket@Thekulkarni:~/CDAC$
```

Question 1

```
kiran@CMKL-kiranw:~/cdac$ less colors.txt
kiran@CMKL-kiranw:~/cdac$ less colors.txt
kiran@CMKL-kiranw:~/cdac$ head  -5 colors.txt
Yellow
Pink
Red
Orange
Voilet
kiran@CMKL-kiranw:~/cdac$ head  -3 colors.txt
Yellow
Pink
Red
kiran@CMKL-kiranw:~/cdac$ head  -7 colors.txt
```

```
Yellow
Pink
Red
Orange
Voilet
Blue
Black
```

3. **Rev filename.txt will revers it's content**

```
kiran@CMKL-kiranw:~/cdac$ rev colors.txt
wolleY
kniP
deR
egnarO
telioV
eulB
kcalB
atnegaM
1wolleY
1deR
```

4. **Wc filename.txt will give you**

First number of line second number of words Third number of characters

```
kiran@CMKL-kiranw:~/cdac$ wc colors.txt
11 10 63 colors.txt
```

1. **If you only wants only number of lines then**

   Wc –l

2. **If you only want words then**

   Wc –w

3. **If you only want characters then**

   Wc –c

4. **You also can combine that using below screenshot cmnd.**

```
kiran@CMKL-kiranw:~/cdac$ wc -l colors.txt
11 colors.txt
kiran@CMKL-kiranw:~/cdac$ wc -w colors.txt
10 colors.txt
kiran@CMKL-kiranw:~/cdac$ wc -c colors.txt
63 colors.txt
kiran@CMKL-kiranw:~/cdac$ wc -lw colors.txt
11 10 colors.txt
kiran@CMKL-kiranw:~/cdac$ wc -wc colors.txt
10 63 colors.txt
kiran@CMKL-kiranw:~/cdac$ wc -L colors.txt
7 colors.txt
```

5. **We can also count same time from differint files**

Using wc file1.txt file2.txt

```
kiran@CMKL-kiranw:~/cdac$ wc file1.txt colors.txt
 0  0  0 file1.txt
11 10 63 colors.txt
11 10 63 total
kiran@CMKL-kiranw:~/cdac$
```

6. **We can sort data using**

Sort colours.txt

```
kiran@CMKL-kiranw:~/cdac$ sort colors.txt

Black
Blue
Magenta
Orange
Pink
Red
Red1
Voilet
Yellow
Yellow1
kiran@CMKL-kiranw:~/cdac$
```

7. **If you want to sort data in reverse use – it will sort data with alphabetical order!**

Sort –r filename.txt

```
kiran@CMKL-kiranw:~/cdac$ sort -r colors.txt
Yellow1
Yellow
Voilet
Red1
Red
Pink
Orange
Magenta
Blue
Black
```

8. **If you want uniq data from your data**

Use uniq file.txt

```
kiran@CMKL-kiranw:~/cdac$ uniq colors.txt
Yellow
Pink
Red
Orange
Voilet
Blue
Black
Magenta
Yellow1
Red1
```

9. **If you want to remove duplicate data then use**

Sort filename.txt |uniq

```
kiran@CMKL-kiranw:~/cdac$ sort colors.txt | uniq

Black
Blue
RED
Red
Yellow
kiran@CMKL-kiranw:~/cdac$
```

10. **If you want to know about all Linux commend then use**

Man cat

```
CAT(1)                                          User Commands

NAME
       cat - concatenate files and print on the standard output

SYNOPSIS
       cat [OPTION]... [FILE]...

DESCRIPTION
       Concatenate FILE(s) to standard output.

       With no FILE, or when FILE is -, read standard input.

       -A, --show-all
              equivalent to -vET

       -b, --number-nonblank
              number nonempty output lines, overrides -n

       -e     equivalent to -vE

       -E, --show-ends
              display $ at end of each line

       -n, --number
              number all output lines
```

11. **If you want all files that start with the letter then use**

ls character*	Example	Ls* a

```
kiran@CMKL-kiranw:~/cdac$ ls A*
A  AA  AAA  AB  ABC  ABCD
```

12. **If you want multiple char data at a same time then**

Use ls [abcd]*

```
kiran@CMKL-kiranw:~/cdac$ ls [abcq]*
a  aa  aaa  aaaa  aaaaaa  calculate  colors.txt  courses.txt
kiran@CMKL-kiranw:~/cdac$
```

13. If you want to use editor to add data then use

Vi filename.txt

```
askdhakjshd
ashdkajshdkjh
aojsdklahds
askdjalkdhjs
akljsdlakjsd
1
sssdahjhaskjdhakshd
3
4
5
6
7
8
9
0
1
2
3
4
~
~
~
~
~
~
~
~
~
~
-- INSERT --
```

14. After inserting the data if you want to escape use

Esq + : + wq

```
Vi Editor:
---------
i : insert model
Esc + :wq => save +quit
```

```
kiran@CMKL-kiranw:~/cdac$ grep -i "unix" g1.txt
Unix
unix
unix
unix
UNix
kiran@CMKL-kiranw:~/cdac$ grep -c "unix" g1.txt
3
kiran@CMKL-kiranw:~/cdac$ grep -l "unix" g1.txt
g1.txt
kiran@CMKL-kiranw:~/cdac$ grep -n "unix" g1.txt
2:unix
3:unix
4 ix
```

Question 4 **Create grep file and write unix Unix UNix,unix and try with grep**

```
kiran@CMKL-kiranw:~/cdac$ cat > g1.txt
Unix
unix
unix
unix
UNix
kiran@CMKL-kiranw:~/cdac$ grep "unix" g1.txt
unix
unix
ur
kiran@CMKL-kiranw:~/cdac$
```