



slington college
(इरिलइटन कलेज)

Module Code & Module Title
Level 5 – Network Operating Systems

Assessment Type

Logbook 8

Semester

2024 Autumn

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Assignment Due Date: Wednesday, December 25, 2024

Assignment Submission Date: Wednesday, December 25, 2024

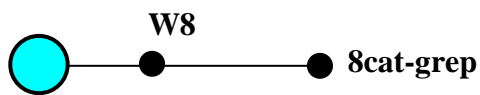
Submitted To: Sarika Dahal

Word Count (Where Required):

I confirm that I understand my coursework needs to be submitted online via MST Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

Practice in using UNIX utilities:

1. Create the directory structure presented in the figure below.



Your
home
directory

```
anshu@DESKTOP-M5IKQ09: ~$  
anshu@DESKTOP-M5IKQ09:~$ mkdir -p W8/8cat-grep  
anshu@DESKTOP-M5IKQ09:~$ cd W8/8cat-grep  
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ |
```

2. Change to the 8cat-grep directory by one step using a relative pathname.

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ cd ../8cat-grep  
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ pwd  
/home/anshu/W8/8cat-grep  
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ ls ..  
8cat-grep  
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ |
```

3. Using the cat utility, create two files

File testa	File testb
Kkkll	KKKKK
lllmm	LLLLL
oo--oo	MMMMM
mmmdd	DDDDD
dddkk	

```

anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ cat > testa
Kkkll
lllmm
oo-oo
mmdd
dddkk
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ cat > testb
KKKKK
LLLLL
MMMMM
DDDDD
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ cat testa
Kkkll
lllmm
oo-oo
mmdd
dddkk
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ cat testb
KKKKK
LLLLL
MMMMM
DDDDD
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ |

```

4) Give the following commands and explain the results for yourself

- `grep ll testa`
- `grep -v ll testa`
- `grep -n ll testa`
- `grep -l ll *`
- `grep -i ll *`
- `grep -i LL *`

- `grep -c ll *`
- `grep '^K' testa testb`
- `grep -n '^' testa`

```

anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep ll testa
Kkkll
lllmm
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -v ll testa
oo-oo
mmmdd
dddkk
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -n ll testa
1:Kkkll
2:lllmm
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -l ll *
testa
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -i ll *
testa:Kkkll
testa:lllmm
testb:LLLLL
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -i LL *
testa:Kkkll
testa:lllmm
testb:LLLLL
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -c ll *
testa:2
testb:0
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep '^K' testa testb
testa:Kkkll
testb:KKKKK
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ grep -n '^' testa
1:Kkkll
2:lllmm
3:oo-oo
4:mmmdd
5:dddkk

```

5. Define the ls alias for ls -al command

Show that your system stores it giving the alias command (without arguments).

Use it in your home directory.

```

anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias
alias ls='ls --color=auto'
alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ lsal ~
total 80
drwx----- 9 anshu anshu 4096 Dec 23 09:18 .
drwxr-xr-x 3 root root 4096 Dec 6 09:35 ..
drwxr-xr-x 2 anshu anshu 4096 Dec 19 18:25 3level-3
drwxr-xr-x 2 anshu anshu 4096 Dec 19 18:24 4level3
-rw-r--r-- 1 anshu anshu 4096 Dec 12 10:14 alscript
-rw-r--r-- 1 anshu anshu 8192 Dec 9 10:28 alscript
-rw----- 1 anshu anshu 4131 Dec 19 18:53 .bash_history
-rw-r--r-- 1 anshu anshu 220 Dec 6 09:35 .bash_logout
-rw-r--r-- 1 anshu anshu 3526 Dec 6 09:35 .bashrc
-rw-r--r-- 1 anshu anshu 99 Dec 12 10:15 combined_file
drwxr-xr-x 4 anshu anshu 4096 Dec 13 09:29 Laptop
drwxr-xr-x 5 anshu anshu 4096 Dec 12 10:20 Nepal
-rw-r--r-- 1 anshu anshu 807 Dec 6 09:35 .profile
-rw-r--r-- 1 anshu anshu 0 Dec 9 10:22 .sudo_as_admin_successful
drwxr-xr-x 3 anshu anshu 4096 Dec 9 10:13 test
-rw-r--r-- 1 anshu anshu 24 Dec 12 10:09 test1
-rw-r--r-- 1 anshu anshu 75 Dec 12 10:12 test2
drwxr-xr-x 3 anshu anshu 4096 Dec 19 18:29 w7
drwxr-xr-x 3 anshu anshu 4096 Dec 23 09:18 W8
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ echo "alias lsal='ls -al'" >> ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ source ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$

```

6. Remove the alias.

Show that your system does not store it.

```

anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ unalias lsal
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias
alias ls='ls --color=auto'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ nano ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ source ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias
alias ls='ls --color=auto'
alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$

```

7. Define this alias again preserving it for the next session
Show that the system still keep this your alias.

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ lsal
total 16
drwxr-xr-x 2 anshu anshu 4096 Dec 23 09:25 .
drwxr-xr-x 3 anshu anshu 4096 Dec 23 09:18 ..
-rw-r--r-- 1 anshu anshu   32 Dec 23 09:24 testa
-rw-r--r-- 1 anshu anshu   24 Dec 23 09:25 testb
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ echo "alias lsal='ls -al'" >> ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ source ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias
alias ls='ls --color=auto'
alias lsal='ls -al'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ lsal
total 16
drwxr-xr-x 2 anshu anshu 4096 Dec 23 09:25 .
drwxr-xr-x 3 anshu anshu 4096 Dec 23 09:18 ..
-rw-r--r-- 1 anshu anshu   32 Dec 23 09:24 testa
-rw-r--r-- 1 anshu anshu   24 Dec 23 09:25 testb
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```

8. Define the nwho alias for the number of system file at UNIX computers.

alias nwho='getent passwd | wc -l'

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias nwho='getent passwd | wc -l'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ nwho
20
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ echo "alias nwho='getent passwd | wc -l'" >> ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ source ~/.bashrc
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ alias
alias ls='ls --color=auto'
alias lsal='ls -al'
alias nwho='getent passwd | wc -l'
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ nwho
20
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```

9. Give the command `nwho`. Compare the figure displayed with ones got by your UNIX-mates.

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ nwho
20
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ nwho
20
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```

10. List your last commands executed giving the `history` command.

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ history
 1  script alscript
 2  whoami
 3  date
 4  ls
 5  ls -a
 6  ls -a -l
 7  cat /etc/passwd
 8  echo "This is a one-line file" > test1
 9  test2
10  tree
11  mkdir -p Nepal/{Bagmati/{ktm,Rasuwa},Gandaki/{Kaski,gorkha}}
12  tree
13  cd /path/to/kaski
14  cd
15  path/to/kaski
16  script alscript
17  whoami
18  date
19  ls
20  ls -a
21  ls -a -l
22  cat /etc/passwd
23  echo "This is a one-line file" > test1
24  cat > test2
25  cat test1
26  cat test2
27  cat test1 test2 > combined_file
28  cd /path/to/Kaski
29  mkdir -p Nepal/{Bagmati/{ktm/Rasuwa},gandaki/{kaski,gorkha}}
30  tree
```

11. Re-execute the *last but one* command using the redo (r) command and the number of the event.

fc -r

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ fc -r 10
tree
.
├── testa
└── testb

1 directory, 2 files
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```

12. Re-execute the command given *three commands ago* using the negative integer.

!-3

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ !-3
history 10
272  nwho
273  echo "alias nwho='getent passwd | wc -l'" >> ~/.bashrc
274  source ~/.bashrc
275  alias
276  nwho
277  history
278  history 10
279  history
280  tree
281  history 10
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```


13. Re-execute the last command which name begins with 'l'.

fc -e -l

```
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$ fc -e -l
lsal
total 16
drwxr-xr-x 2 anshu anshu 4096 Dec 23 09:25 .
drwxr-xr-x 3 anshu anshu 4096 Dec 23 09:18 ..
-rw-r--r-- 1 anshu anshu   32 Dec 23 09:24 testa
-rw-r--r-- 1 anshu anshu   24 Dec 23 09:25 testb
anshu@DESKTOP-M5IKQ09:~/W8/8cat-grep$
```