

OS MID LAB

Submitted By: Sagar Chhabriya BSCS-IV (March 21, 2024)

1. Mkdir

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ mkdir one
```

2. Cd

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ cd one  
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$
```

3. touch

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ touch file1.txt
```

4. nano

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ nano file1.txt
```

5. :q!



```
root1@RADHERADHE: /mnt/c  X + -  
GNU nano 6.2 file1.txt  
[ Read 0 lines ]  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify
```

6. Carriage return

```
root1@RADHERADHE: /mnt/c  GNU nano 6.2  file1.txt *
This is file No.1

Save modified buffer?
Y Yes
N No      ^C Cancel
```

7. write

```
root1@RADHERADHE: /mnt/c  GNU nano 6.2  file1.txt *
This is file No.1

File Name to Write: file1.txt
^G Help      M-D DOS Format  M-A Append     M-B Backup File
^C Cancel    M-M Mac Format  M-P Prepend    ^T Browse
```

8. cat

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cat file1.txt
This is file No.1
```

9. clear

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ clear
```

10. vim

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ vim file1.txt
```

11. Insert Mode

```
This is file No.1
```

-- INSERT --

2,1 All

12. Esc Mode

[illegible]

13. ls

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls  
file1.txt
```

14. pwd

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ pwd  
/mnt/c/Users/Mr Sagar Kumar/one
```

15. cd ..

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cd ..  
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ |
```

16. cd -

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ cd -  
/mnt/c/Users/Mr Sagar Kumar/one
```

17. cd ~

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cd ~  
root1@RADHERADHE:~$ |
```

18. find <filename>

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ find one  
one  
one/file1.txt
```

19. head

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ head file1.txt  
This is line 1 of file1  
This is line 2 of file1  
This is line 3 of file1  
This is line 4 of file1  
This is line 5 of file1  
This is line 6 of file1  
This is line 7 of file1  
This is line 8 of file1  
This is line 9 of file1  
This is line 10 of file1
```

20. cat

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cat file1.txt > file2.txt
```

21. tail

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ tail file1.txt
This is line 6 of file1
This is line 7 of file1
This is line 8 of file1
This is line 9 of file1
This is line 10 of file1
This is line 11 of file1
This is line 12 of file1
This is line 13 of file1
This is line 14 of file1
This is line 15 of file1
```

22. diff

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ diff file1.txt file2.txt
1,15c1,14
< This is line 1 of file1
< This is line 2 of file1
< This is line 3 of file1
< This is line 4 of file1
< This is line 5 of file1
< This is line 6 of file1
< This is line 7 of file1
< This is line 8 of file1
< This is line 9 of file1
< This is line 10 of file1
< This is line 11 of file1
< This is line 12 of file1
< This is line 13 of file1
< This is line 14 of file1
< This is line 15 of file1
---
> This is line 1 of file2
> This is line 2 of file2
> This is line 3 of file2
> This is line 4 of file2
> This is line 5 of file2
> This is line 6 of file2
> This is line 7 of file2
> This is line 8 of file2
> This is line 9 of file2
> This is line 10 of file2
> This is line 11 of file2
> This is line 12 of file2
> This is line 13 of file2
> This is line 14 of file2
```

23. nl

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ nl file1.txt
 1 This is line 1 of file1
 2 This is line 2 of file1
 3 This is line 3 of file1
 4 This is line 4 of file1
 5 This is line 5 of file1
 6 This is line 6 of file1
 7 This is line 7 of file1
 8 This is line 8 of file1
 9 This is line 9 of file1
10 This is line 10 of file1
11 This is line 11 of file1
12 This is line 12 of file1
13 This is line 13 of file1
14 This is line 14 of file1
15 This is line 15 of file1
```

24. wc

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ wc file2.txt
14  85 342 file2.txt
```

25. hostname

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ hostname
RADHERADHE
```

26. hostname -i

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ hostname -i
127.0.1.1
```

27. whoami

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ whoami
root1
```

28. who

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ who
root1      pts/1          2024-03-21 10:10
```

29. ping

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ping 127.0.1.1
PING 127.0.1.1 (127.0.1.1) 56(84) bytes of data.
64 bytes from 127.0.1.1: icmp_seq=1 ttl=64 time=0.760 ms
64 bytes from 127.0.1.1: icmp_seq=2 ttl=64 time=0.032 ms
64 bytes from 127.0.1.1: icmp_seq=3 ttl=64 time=0.040 ms
64 bytes from 127.0.1.1: icmp_seq=4 ttl=64 time=0.041 ms
64 bytes from 127.0.1.1: icmp_seq=5 ttl=64 time=0.172 ms
^C
--- 127.0.1.1 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4089ms
rtt min/avg/max/mdev = 0.032/0.209/0.760/0.280 ms
```

30. grep

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ grep "line" file1.txt
This is line 1 of file1
This is line 2 of file1
This is line 3 of file1
This is line 4 of file1
This is line 5 of file1
This is line 6 of file1
This is line 7 of file1
This is line 8 of file1
This is line 9 of file1
This is line 10 of file1
This is line 11 of file1
This is line 13 of file1
This is line 14 of file1
This if line 15 of file1
```

31. tac

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ tac file1.txt
This if line 15 of file1
This is line 14 of file1
This is line 13 of file1
This is line 12 of file1
This is line 11 of file1
This is line 10 of file1
This is line 9 of file1
This is line 8 of file1
This is line 7 of file1
This is line 6 of file1
This is line 5 of file1
This is line 4 of file1
This is line 3 of file1
This is line 2 of file1
This is line 1 of file1
```


32. ls -a

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls -a
.  ..  file1.txt  file2.txt
```

33. ls -h

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls -h
file1.txt  file2.txt
```

34. ls -d

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls -d
.
```

35. ls -i

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls -i
65020719620184750 file1.txt  5348024557912209 file2.txt
```

36. locate one

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ locate one
/etc/timezone
/etc/fonts/conf.avail/10-hinting-none.conf
/etc/ssl/certs/TeliaSonera_Root_CA_v1.pem
/mnt/c/Program Files/Apache Software Foundation/Tomcat 10.1/webapps/examples/jsp/forward/one.jsp
/mnt/c/Program Files/Apache Software Foundation/Tomcat 10.1/webapps/examples/jsp/forward/one.jsp.html
/mnt/c/Program Files/Apache Software Foundation/apache-tomcat-10.1.12-windows-x64/apache-tomcat-10.1.12/webapps/examples/jsp/forward/one.jsp
/mnt/c/Program Files/Apache Software Foundation/apache-tomcat-10.1.12-windows-x64/apache-tomcat-10.1.12/webapps/examples/jsp/forward/one.jsp.html
/mnt/c/Program Files/Apache Software Foundation/glassfish4/glassfish/lib/schemas/weblogic-wsee-standaloneclient
^C
```

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ date
Thu Mar 21 10:52:52 PKT 2024
```

37. date

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ time

real    0m0.000s
user    0m0.000s
sys     0m0.000s
```

38. cal

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cal
      March 2024
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```

39. man

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ man
What manual page do you want?
For example, try 'man man'.
```

40. mv

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ mv file1.txt fileone.txt
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
file2.txt  fileone.txt
```

41. cp

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cp fileone.txt file3.txt
```

42. uname

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ uname  
Linux
```

43. ip

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ip  
Usage: ip [ OPTIONS ] OBJECT { COMMAND | help }  
       ip [ -force ] -batch filename  
where  OBJECT := { address | addrlabel | fou | help | ila | ioam | l2tp | link |  
                  macsec | maddress | monitor | mptcp | mroute | mrule |  
                  neighbor | neighbour | netconf | netns | nexthop | ntable |  
                  ntbl | route | rule | sr | tap | tcpmetrics |  
                  token | tunnel | tuntap | vrf | xfrm }  
      OPTIONS := { -V[ersion] | -s[tatistics] | -d[etails] | -r[esolve] |  
                  -h[uman-readable] | -iec | -j[son] | -p[retty] |  
                  -f[amily] { inet | inet6 | mpls | bridge | link } |  
                  -4 | -6 | -M | -B | -O |  
                  -l[oops] { maximum-addr-flush-attempts } | -br[ief] |  
                  -o[neline] | -t[imestamp] | -ts[hort] | -b[atch] [filename] |  
                  -rc[vbuf] [size] | -n[etns] name | -N[umeric] | -a[ll] |  
                  -c[olor]}
```

44. uname -i

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ uname -i  
x86_64
```

45. help

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ help  
GNU bash, version 5.1.16(1)-release (x86_64-pc-linux-gnu)  
These shell commands are defined internally. Type 'help' to see this list.  
Type 'help name' to find out more about the function 'name'.  
Use 'info bash' to find out more about the shell in general.  
Use 'man -k' or 'info' to find out more about commands not in this list.
```

46. history

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ history
224  ifconfig
225  grep -i "This" first.txt
226  grep -i "This" sample.txt
227  who
```

47. less

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar$ cd one
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
- file2.txt file3.txt file4.txt fileone.txt inner
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ less file2.txt
```

48. more

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
- file2.txt file3.txt fileone.txt
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ more -

*** -: directory ***
```

49. append >>

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ touch fileone.txt file2.txt file3.txt >> file4.txt
```

50. rm

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
- file2.txt file3.txt file4.txt fileone.txt inner
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ rmdir inner
rmdir: failed to remove 'inner': Directory not empty
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ cd inner
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one/inner$ ls
innerfile.txt
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one/inner$ rm innerfile.txt
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one/inner$ ls
```

51. rmdir

```
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
file2.txt file3.txt file4.txt fileone.txt inner
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ rmdir inner
root1@RADHERADHE:/mnt/c/Users/Mr Sagar Kumar/one$ ls
file2.txt file3.txt file4.txt fileone.txt
```