Activity-2

Aim: Execute the following Linux commands: TTY Command, uname command, Date, cal, Whoami, Man, Pwd, Whatis, Fdisk, Sudo, Ifconfig, Chmod, Umask, Adduser, Ping, Hostname, Dpkg –l

Learning Outcome: Able to work Linux environment by using Linux commands.

Duration: 8 Hour.

List of Hardware/Software requirements:

1. Computer Desktop/Laptop
2. Linux Operating System

Code/Program/Procedure (with comment):

❖ tty

✓ tty

There is a command called tty that displays terminal-related information.

prints the file name of the terminal connected to standard input.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ tty
/dev/pts/0
mrpglu@MRPGLU-virtual-machine:~$ sudo tty
/dev/pts/1
```

❖ uname

✓ uname

print information about the system.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ uname
Linux
```

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❖ date

- ✓ date

display the system date and time.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ date
Monday 21 November 2022 11:25:16 AM IST
```

❖ cal

- ✓ cal

if not working type

sudo apt install ncal

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ cal
Command 'cal' not found, but can be installed with:
sudo apt install ncal
mrpglu@MRPGLU-virtual-machine:~$ sudo apt install ncal
[sudo] password for mrpglu:
Reading package lists... Done
```

shows current month calendar as output

```
mrpglu@MRPGLU-virtual-machine:~$ cal
    November 2022
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
```

❖ whoami

- ✓ whoami

display the username of the current user.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ whoami
mrpglu
```

Activity-2

❖ pwd

- ✓ pwd

print the full system path os the current working directory to standard output.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ pwd
/home/mrpglu
```

❖ umask

- ✓ umask

Set permission mask.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ umask
0002
```

❖ hostname

- ✓ hostname

obtain the DNS name and set the system's hostname or NIS
domain name.

Output:

```
manjeetjangra@lalitkumarkoli: $ hostname
lalitkumarkoli
```

❖ ping

- ✓ ping google.com

contains the amount of time it takes for every packet to reach its destination and return.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ ping google.com
PING google.com (142.250.67.174) 56(84) bytes of data.
64 bytes from bom12s07-in-f14.1e100.net (142.250.67.174):
8 time=218 ms
```

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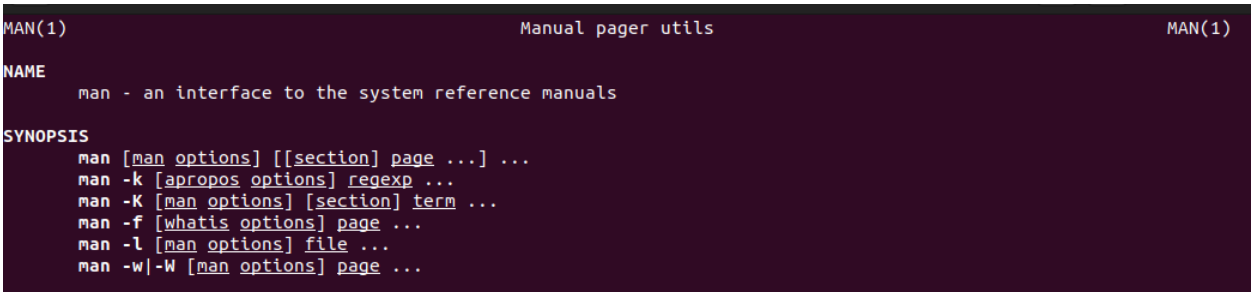
❖ man

✓ man man

it shows the manual pages of the command.

Output:

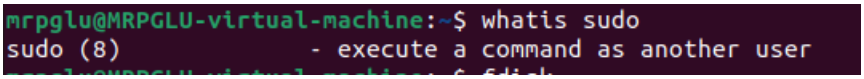


❖ whatis

✓ whatis

used to get a one-line manual page descriptions.

Output:

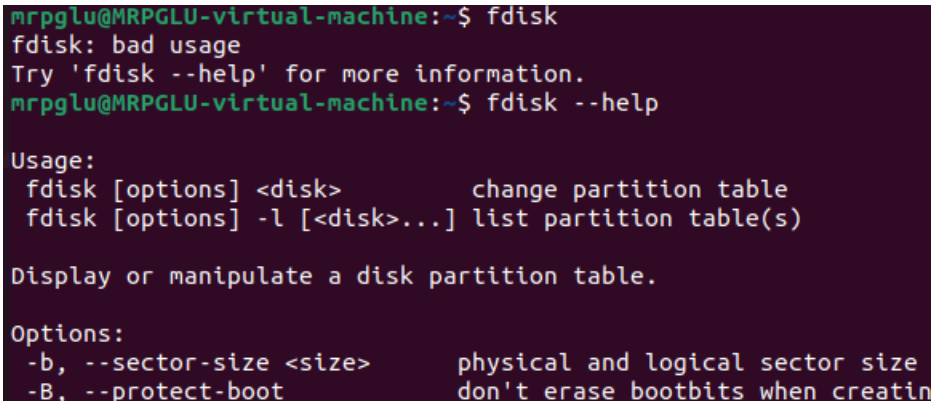


❖ fdisk

✓ fdisk --help

it is a command-line who show the options of disk.

Output:



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- ✓ sudo fdisk -l

it is a command-line partition table editor for Linux.

```
mrpglu@MRPGLU-virtual-machine:~$ sudo fdisk -l
[sudo] password for mrpglu:
Disk /dev/loop0: 4 KiB, 4096 bytes, 8 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```

❖ sudo

- ✓ sudo

for any command to be done with administrative or root privileges.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-ABknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-ABknS] [-g group] [-h host] [-p prompt] [-U user] [-u
            user] [command]
usage: sudo [-ABbEHknPS] [-r role] [-t type] [-C num] [-D directory] [-g
            group] [-h host] [-p prompt] [-R directory] [-T timeout] [-u
            user] [VAR=value] [-i|-s] [<command>]
```

❖ ifconfig

- ✓ ifconfig

configure the kernel-resident network interfaces.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.110.128  netmask 255.255.255.0  broadcast 192.168.110.
255
        inet6 fe80::b116:b447:45f7:2720  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:f5:4a:f6  txqueuelen 1000  (Ethernet)
        RX packets 284406  bytes 426227327 (426.2 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 27830  bytes 1772271 (1.7 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
```

❖ chmod

- ✓ chmod gt.sh

to make a file executable and to change the permissions grated to it in Linux.

Activity-2

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ chmod +x gt.sh
mrpglu@MRPGLU-virtual-machine:~$
```

❖ adduser

- ✓ adduser

add/create a new user.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ adduser
adduser: Only root may add a user or group to the system.
mrpglu@MRPGLU-virtual-machine:~$
```

❖ dpkg -l

- ✓ dpkg -l

sorts thought a tree of Debian binary packages and creates a Packages file.

Output:

```
mrpglu@MRPGLU-virtual-machine:~$ dpkg -l
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWai
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name                                      Version
+++-=========================================-====================
ii  accountsservice                           22.07.5-2ubuntu1.3
ii  acl                                       2.3.1-1
ii  acpi-support                              0.144
ii  acpid                                     1:2.0.33-1ubuntu1
ii  adduser                                   3.118ubuntu5
ii  adwaita-icon-theme                        41.0-1ubuntu1
ii  aisleriot                                 1:3.22.22-1
ii  alsa-base                                 1.0.25+dfsg-0ubuntu7
ii  alsa-topology-conf                        1.2.5.1-2
ii  alsa-ucm-conf                             1.2.6.3-1ubuntu1
ii  alsa-utils                                1.2.6-1ubuntu1
ii  amd64-microcode                           3.20191218.1ubuntu2
```