Experiment No - 2

Different types of Commands in LINUX -

1) Name - date
   Syntax - date
   Description - Displays current date and time

```
tryhackme@linux1:~$ date
Thu Sep 12 08:55:26 UTC 2024
```

2) Name - whoami
   Syntax - whoami
   Description -

```
tryhackme@linux1:~$ whoami
tryhackme
```

3) Name - whatis
   Syntax - whatis ls
   Description - Displays the name of current user who is log in

```
tryhackme@linux1:~$ whatis ls
ls (1)              - list directory contents
```

4) Name - pwd
   Syntax - pwd
   Description - Displays the current working directory's full path

```
tryhackme@linux1:~$ pwd
/home/tryhackme
```

5) Name - mkdir
   Syntax - mkdir directory_name
   Description - Creates new directories in the file system

```
tryhackme@linux1:~$ mkdir akshat
tryhackme@linux1:~$ ls
access.log  akshat  folder1  folder2  folder3  folder4
```

6) Name - rmdir
   Syntax - rmdir directory_name
   Description - Removes empty directories from the system.

```
tryhackme@linux1:~$ rmdir akshat
tryhackme@linux1:~$ ls
access.log  folder1  folder2  folder3  folder4
```

7) Name - ls
   Syntax - ls
   Description - Lists files and directories in the current working directory.

```
tryhackme@linux1:~$ ls
access.log   akshat   folder1   folder2   folder3   folder4
```

8) Name - ls-l

Syntax - ls-l

Description - Displays a long list of files and directories in a directory

```
tryhackme@linux1:~$ ls -l
total 84
-rw-rw-r-- 1 tryhackme tryhackme 65522 May 10  2021 access.log
drwxrwxr-x 2 tryhackme tryhackme  4096 Sep 12 09:18 akshat
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder1
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder2
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder3
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder4
```

9) Name - touch

   Syntax - touch file_name

   Description - Creating empty files and updating the timestamps of existing files.

```
tryhackme@linux1:~$ touch myfile
```

10) Name - cd

   Syntax - cd directory_name

   Description - Used to change the current working directory.

```
tryhackme@linux1:~$ cd akshat
tryhackme@linux1:~/akshat$ cd ..
tryhackme@linux1:~$ 
```

11) Name - cat

   Syntax - cat file_name

   Description - Displays file contents.

```
tryhackme@linux1:~$ cat myfile
Hello my name is Akshat Mehta
```

12) Name - cat>

   Syntax - cat>file_name

   Description - Overwrite an existing file with new content.

```
tryhackme@linux1:~$ cat>myfile
Hello my name is Akshat Mehta
```

13) Name - cat>>

   Syntax - cat>>file_name

   Description - Add something in the last of a file.

```
tryhackme@linux1:~$ cat>>myfile
I am from Dewas.
tryhackme@linux1:~$ cat myfile
Hello my name is Akshat Mehta
I am from Dewas.
```

14) Name - cp

Syntax - cp myfile newfile

Description - Copies files and directories.

```
tryhackme@linux1:~$ cp myfile newfile
tryhackme@linux1:~$ cat newfile
Hello my name is Akshat Mehta
I am from Dewas.
```

15) Name - head

Syntax - head file_name

Description - Display the first 10 lines of files.

```
tryhackme@linux1:~$ cat>myfile
abc
def
ghi
jkl
mno
pqr
stu
vyx
yz
123
456
789
101112
```

```
tryhackme@linux1:~$ head myfile
abc
def
ghi
jkl
mno
pqr
stu
vyx
yz
123
```

16) Name - tail

Syntax - tail file_name

Description - Displays the last 10 lines of files.

```
tryhackme@linux1:~$ cat>myfile
abc
def
ghi
jkl
mno
pqr
stu
vyx
yz
123
456
789
101112
```

```
tryhackme@linux1:~$ tail myfile
jkl
mno
pqr
stu
vyx
yz
123
456
789
101112
```

17) Name - ls -a

Syntax - ls -a

Description - List all files including hidden files.

```
tryhackme@linux1:~$ ls -a
.              .bash history   .cache       akshat    folder3
..             .bash logout    .profile     folder1   folder4
.Xauthority    .bashrc         access.log   folder2   myfile
```

18) Name - mv

Syntax -

Description - To move a file or directory to a new location.

```
tryhackme@linux1:~$ mv myfile newmyfile
tryhackme@linux1:~$ ls -l
total 88
-rw-rw-r-- 1 tryhackme tryhackme 65522 May 10  2021 access.log
drwxrwxr-x 2 tryhackme tryhackme  4096 Sep 13 07:16 akshat
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder1
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder2
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder3
drwxr-xr-x 2 tryhackme tryhackme  4096 May 10  2021 folder4
-rw-rw-r-- 1 tryhackme tryhackme    54 Sep 13 07:10 newmyfile
```

19) Name - grep

Syntax - grep [options] pattern [files]

Description - Used to search for specific patterns in a file.

```
tryhackme@linux1:~$ grep "Akshat" myfile
Hello my name is Akshat Mehta
```

20) Name - um

Syntax -

Description -

21) Name - su

Syntax - Used to switch from one user to another user.

Description -

```
tryhackme@linux1:~$ su tryhackme
Password:
```

22) Name - sudo

Syntax - sudo [command]

Description - To run programs with elevated privileges as another user, such as the root user.

```
tryhackme@linux1:~$ sudo -V
Sudo version 1.8.31
Sudoers policy plugin version 1.8.31
Sudoers file grammar version 46
Sudoers I/O plugin version 1.8.31
```

23) Name - ipconfig

Syntax - ipconfig [options]

Description - Displays information about your computer network settings.

```
tryhackme@linux1:~$ ip
Usage: ip [ OPTIONS ] OBJECT { COMMAND | help }
       ip [ -force ] -batch filename
where  OBJECT := { link | address | addrlabel | route | rule | neigh | ntable
|
                   tunnel | tuntap | maddress | mroute | mrule | monitor | xfr
m |
                   netns | l2tp | fou | macsec | tcp metrics | token | netconf
 | ila |
                   vrf | sr | nexthop }
       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 | -I | -D | -M | -B | -0 |
                    -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]}
```

24)Name - ifconfig

Syntax - ifconfig [interface] [options]

Description - Used to view and configure network interface settings

25) Name - nano*

Syntax - nano filename

Description - Edit files directly from the command line of Unix-based systems.

```
  GNU nano 4.8                      myfile
Hello my name is Akshat Mehta
```
```
^G Get Help    ^O Write Out   ^W Where Is    ^K Cut Text    ^J Justify
^X Exit        ^R Read File   ^\ Replace     ^U Paste Text  ^T To Spell
```

26) Name - find

   Syntax - find [directory/to/search] [parameter] [filename]

   Description - Search for files and directories based on various criteria.

27) Name - ps

   Syntax - ps [options]

   Description - Displays information about the processes running on your system.

28) Name - *vi

   Syntax - vi [filename]

   Description - Edit an existing file or create a new file from scratch.

```
tryhackme@linux1:~$ vi myfile
```

```
My name is Akshat Mehta and i am from dewas




















-- INSERT --                                    1,44
```

```
tryhackme@linux1:~$ cat myfile
My name is Akshat Mehta and i am from dewas
```

29) Name - ln

   Syntax - ln [options] source_file target_file

   Description - Used to create links to files or directories

30) Name - pid

   Syntax - pidof [options] process_name.

   Description - Used to find process id(PID) of a running process.

```
tryhackme@linux1:~$ pidof bash
1027
tryhackme@linux1:~$ pidof -s bash
1027
tryhackme@linux1:~$ pidof -x bash
1027
```

31) Name - gid

 Syntax -

 Description -

```
tryhackme@linux1:~$ id
uid=1001(tryhackme) gid=1001(tryhackme) groups=1001(tryhackme)
tryhackme@linux1:~$ id -g tryhackme
1001
```

32) Name - chmod

 Syntax -

 Description -

33) Name - man

 Syntax -

 Description -

```
tryhackme@linux1:~$ man ls
LS(1)                          User Commands                          LS(1)

NAME
       ls - list directory contents

SYNOPSIS
       ls [OPTION]... [FILE]...

DESCRIPTION
       List  information about the FILEs (the current directory by default).
       Sort entries alphabetically if none of -cftuvSUX nor --sort is speci-
       fied.

       Mandatory  arguments  to long options are mandatory for short options
       too.

       -a, --all
              do not ignore entries starting with .

       -A, --almost-all
              do not list implied . and ..

       --author
              with -l, print the author of each file

       -b, --escape
              print C-style escapes for nongraphic characters

       --block-size=SIZE
              with -l,  scale  sizes  by  SIZE  when  printing  them;  e.g.,
              '--block-size=M'; see SIZE format below

       -B, --ignore-backups
              do not list implied entries ending with ~

       -c     with  -lt: sort by, and show, ctime (time of last modification
              of file status information); with -l: show ctime and  sort  by
              name; otherwise: sort by ctime, newest first
```

34) Name - uid

Syntax -

Description -

```
tryhackme@linux1:~$ id
uid=1001(tryhackme) gid=1001(tryhackme) groups=1001(tryhackme)
tryhackme@linux1:~$ id -u tryhackme
1001
```

35) Name - wc

    Syntax - wc filename

    Description - Used to find out number of lines, word count, byte and characters count in the files specified in the file arguments.

```
tryhackme@linux1:~$ wc myfile
 1  6 30 myfile
```

36) Name - df

    Syntax - df

    Description -

```
tryhackme@linux1:~$ df
Filesystem      1K-blocks     Used Available Use% Mounted on
/dev/root       10089288 2799104   7273800  28% /
devtmpfs          469512        0    469512   0% /dev
tmpfs             477836        0    477836   0% /dev/shm
tmpfs              95568      860     94708   1% /run
tmpfs               5120        0      5120   0% /run/lock
tmpfs             477836        0    477836   0% /sys/fs/cgroup
/dev/loop0         28800    28800         0 100% /snap/amazon-ssm-agent/2012
/dev/loop1         25856    25856         0 100% /snap/amazon-ssm-agent/7993
/dev/loop2         57088    57088         0 100% /snap/core18/2829
/dev/loop3         56704    56704         0 100% /snap/core18/1885
/dev/loop5         94080    94080         0 100% /snap/lxd/24061
/dev/loop6        106752   106752         0 100% /snap/core/17200
/dev/loop4         72320    72320         0 100% /snap/lxd/16922
/dev/loop7         65536    65536         0 100% /snap/core20/2318
tmpfs              95564        0     95564   0% /run/user/1001
```

37) Name - less

    Syntax - less file_name

    Description -

```
tryhackme@linux1:~$ less myfile
Hello my name is Akshat Mehta
(END)
```

38) Name - du

    Syntax - du file_name

    Description -

```
tryhackme@linux1:~$ du myfile
4       myfile
```