LAB Manual

Name of Student : PRIYANKA GUPTA	PRN: 22070122157
Semester : IV	**Year AY 23-24**
Subject Title: Operating Systems Lab	
EXPERIMENT No : 2	Assignment No: 3
TITLE : Basic Shell commands	DoP : 29/01/2024

Aim : Demonstrate the use of basic Shell commands

Learning Outcome: *1. To understand the shell command*

2. To Demonstrate the shell command

Hardware/Software : (It should be handwritten)

Theory: (It should be handwritten)

pwd, ls, cd, Touch, mkdir, cat, Rm, Bc, Tty, Who, Man, Date, History, ps, time, Head, Tail, cp, sort, wc, chmod

Output: snapshots of commands demonstration

Conclusion: (It should be handwritten)

assessment schemes.

Attendance	Discipline	Short oral	Correctness of Lab Report	Timely completion of Lab Report	Total marks (10)	Signature of Teacher with Date

pwd

```
student@ubuntu:~$ pwd
/home/student
```

ls

```
student@ubuntu:~$ ls
Desktop    Downloads  np131     Public  Templates
Documents  Music      Pictures  snap    Videos
```

Bc

```
student@ubuntu:~$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software
 Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
5+3
8
7*5
35
4-1
3
8/2
4
q
0
\c
(standard_in) 6: illegal character: \
q
0
quit
```

Sudo apt--get install

```
root@ubuntu:/home/student# sudo apt-get install nasm
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  nasm
0 upgraded, 1 newly installed, 0 to remove and 175 not upgraded.
Need to get 375 kB of archives.
After this operation, 3,345 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/universe amd64 nasm amd64 2.15.0
5-1 [375 kB]
Fetched 375 kB in 2s (238 kB/s)
Selecting previously unselected package nasm.
(Reading database ... 202797 files and directories currently installed.)
Preparing to unpack .../nasm_2.15.05-1_amd64.deb ...
Unpacking nasm (2.15.05-1) ...
Setting up nasm (2.15.05-1) ...
Processing triggers for man-db (2.10.2-1) ...
```

Cd

```
root@ubuntu:/home/student# cd np131
root@ubuntu:/home/student/np131# touch hello.txt
```

Touch

```
root@ubuntu:/home/student/np131# touch hello.txt
root@ubuntu:/home/student/np131# ls
hello.txt
```

History

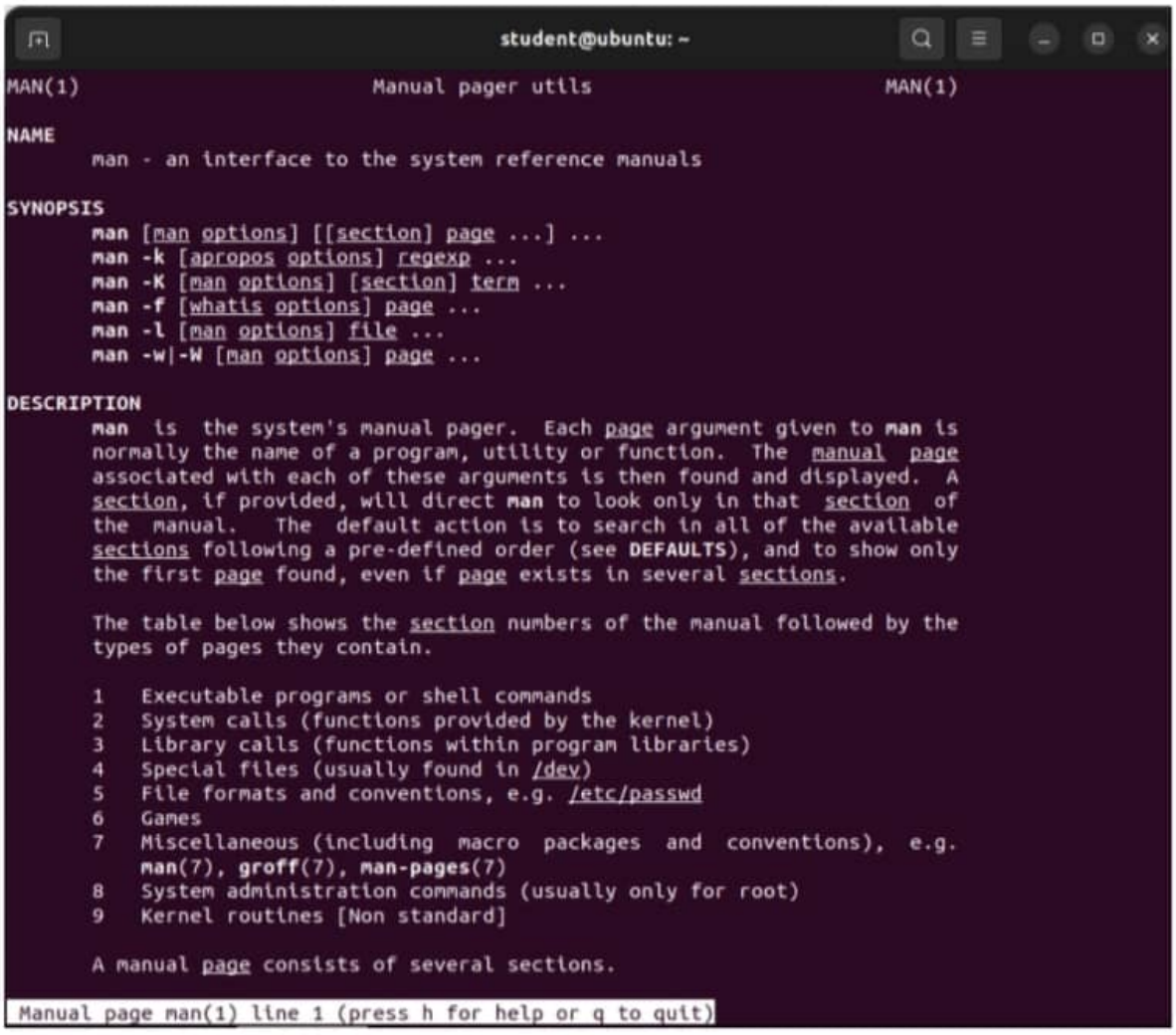
```
root@ubuntu:/home/student# history
    1  sudo apt-get nasm
    2  sudo apt-get install nasm
    3  man nasm
    4  date+%h
    5  history
```

Mkdir, rkdir, ls

```
student@ubuntu:~$ mkdir helloworld
student@ubuntu:~$ ls
Desktop    Downloads   Music  Pictures  snap       Videos
Documents  helloworld  np131  Public    Templates
student@ubuntu:~$ rmdir helloworld
student@ubuntu:~$ ls
Desktop    Downloads  np131     Public  Templates
Documents  Music      Pictures  snap    Videos
student@ubuntu:~$
```

Man

```
student@ubuntu:~$ man
What manual page do you want?
For example, try 'man man'.
student@ubuntu:~$ man man
```



Tty, who

```
student@ubuntu:~$ tty
/dev/pts/0
student@ubuntu:~$ who
student  tty2         2024-01-17 11:09 (tty2)
```

Date

```
student@ubuntu:~$ date +%h
Jan
student@ubuntu:~$ date +%m
01
student@ubuntu:~$ date +%Y
2024
student@ubuntu:~$ date +%y
24
student@ubuntu:~$ date +p
p
student@ubuntu:~$ date +%p
PM
student@ubuntu:~$ date +%d
17
student@ubuntu:~$ date +%A
Wednesday
student@ubuntu:~$ date +%B
January
student@ubuntu:~$
```

time

```
student@ubuntu:~$ time

real    0m0.000s
user    0m0.000s
sys     0m0.000s
student@ubuntu:~$
```

Head

```
student@ubuntu:~/np131$ head text
head: cannot open 'text' for reading: No such file or directory
student@ubuntu:~/np131$ head text.txt
For all of us, nature is crucial. It's the reason for the existence of life on this planet. Nat
ure is home to many different creatures. All living organisms benefit from the natural balance
maintained by Mother Nature. The study of the natural environment is a separate discipline of s
cience. Every element has its own story to tell. Nature's beauty is portrayed through the sun a
nd moon, the plants, the flowers, etc. It is a common belief that reacting to something is a na
tural human characteristic. Naturally drawn characteristics are defined as genetic traits of an
 organism in sociology. The resources of nature are plentiful. The proper use of resources aids
 in the conservation of the environment. Natural scavengers include a variety of land and marin
e animals. Nature has provided us with a variety of ways to utilise it effectively.
```

Tail

```
student@ubuntu:~/np131$ tail text.txt
For all of us, nature is crucial. It's the reason for the existence of life on this planet. Nat
ure is home to many different creatures. All living organisms benefit from the natural balance
maintained by Mother Nature. The study of the natural environment is a separate discipline of s
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e animals. Nature has provided us with a variety of ways to utilise it effectively.

With the increasing population, the threats towards nature are increasing. With the growth in p
opulation, the resources are now depleting. Excessive levels of air and environmental pollutant
s add to the mix. Industrial waste, unrestricted vehicle use, illicit tree cutting, wildlife hu
nting, nuclear power plants, and a slew of other factors are contributing to the disruption of
natural systems. The extinction of species as enormous as dinosaurs and the survival of animals
 as tiny as ants have been documented in history. It is unavoidable to remember, among other th
ings, that nature can play both a protective and destructive role. Natural disasters, pandemics
, and natural crisis scenarios have demonstrated the need for humans to maintain the subtle bal
ance of nature in order to ensure the continuation of life on Earth for the benefit of future g
enerations.
student@ubuntu:~/np131$
```

Cp

```
student@ubuntu:~$ cp hello HELLO
cp: cannot stat 'hello': No such file or directory
student@ubuntu:~$
```

Wc, rm

```
student@ubuntu:~/np131$ wc text.txt
   3  273 1716 text.txt
student@ubuntu:~/np131$ rm text.txt
student@ubuntu:~/np131$ ls
hat
```

Cd ..

```
student@ubuntu:~/np131$ ls
student@ubuntu:~/np131$ cd ..
student@ubuntu:~$
```

Sort

```
student@ubuntu:~/ap140$ sort hello.txt
hello world
```

Conclusion: I can now understand and use basic terminal commands and see their outputs.