

Lab1: Basic Gate Operations

Execute the following Linux commands on Linux terminal and verify the output.

1. whoami

```
harsh@HP-Pavilion:~/ubuntu-new$ whoami
harsh
```

2. pwd

```
harsh@HP-Pavilion:~/ubuntu-new$ pwd
/home/harsh/ubuntu-new
```

3. ls

```
harsh@HP-Pavilion:~$ ls
ubuntu-new
```

4. ls -r

```
harsh@HP-Pavilion:~$ ls -R
.:
ubuntu-new
```

5. ls -a

```
harsh@HP-Pavilion:~$ ls -a
.  ..  .bash_logout  .bashrc  .motd_shown  .profile  ubuntu-new
```

6. history

```
harsh@HP-Pavilion:~$ history
1  ls
2  mkdir ubuntu-new
3  ls
4  cd ubuntu-new/
5  clear
6  whoami
7  pwd
8  ls
9  mkdir
10 ../
11 cd ../
12 ld
13 ls
14 ls -R
15 ls -a
16 history
```

7. clear

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/lab1$ clear
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/lab1$
```

8. echo

```
harsh@HP-Pavilion:~$ echo "This is Linux"
This is Linux
```

9. touch

```
harsh@HP-Pavilion:~$ touch file1.txt
harsh@HP-Pavilion:~$ ls
file1.txt  ubuntu-new
```

10. rm

```
harsh@HP-Pavilion:~$ rm file1.txt
harsh@HP-Pavilion:~$ ls
ubuntu-new
```

11. mkdir

```
harsh@HP-Pavilion:~/ubuntu-new$ mkdir
mkdir: missing operand
```

12. rmdir

```
harsh@HP-Pavilion:~$ rmdir ubuntu-new/
harsh@HP-Pavilion:~$ ls
```

13. mv

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/lab1$ mv file2.txt lab2
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~/lab1$ ls
file1.txt  lab2
```

14. cd

```
harsh@HP-Pavilion:~$ cd lab1/
harsh@HP-Pavilion:~/lab1$ ls
file1.txt
```

15. cmp

```
harsh@HP-Pavilion:~/lab1$ cmp file1.txt file2.txt
file1.txt file2.txt differ: byte 13, line 1
```

16. cat

```
harsh@HP-Pavilion:~/lab1$ cat file1.txt
This is file1
```

17. cal

```
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~$ cal
  Januar 2023
So Mo Di Mi Do 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
```

18. cal -y

```
onworks@onworks-Standard-PC-l440FX-PIIX-1996:~$ cal -y
2023
  Januar          Februar          März
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
 1  2  3  4  5  6  7          1  2  3  4          1  2  3  4
 8  9 10 11 12 13 14    5  6  7  8  9 10 11    5  6  7  8  9 10 11
15 16 17 18 19 20 21    12 13 14 15 16 17 18    12 13 14 15 16 17 18
22 23 24 25 26 27 28    19 20 21 22 23 24 25    19 20 21 22 23 24 25
29 30 31                26 27 28                26 27 28 29 30 31

  April          Mai          Juni
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
          1          1  2  3  4  5  6          1  2  3
 2  3  4  5  6  7  8    7  8  9 10 11 12 13    4  5  6  7  8  9 10
 9 10 11 12 13 14 15    14 15 16 17 18 19 20    11 12 13 14 15 16 17
16 17 18 19 20 21 22    21 22 23 24 25 26 27    18 19 20 21 22 23 24
23 24 25 26 27 28 29    28 29 30 31                25 26 27 28 29 30
30

  Juli          August          September
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
          1          1  2  3  4  5          1  2
 2  3  4  5  6  7  8    6  7  8  9 10 11 12    3  4  5  6  7  8  9
 9 10 11 12 13 14 15    13 14 15 16 17 18 19    10 11 12 13 14 15 16
16 17 18 19 20 21 22    20 21 22 23 24 25 26    17 18 19 20 21 22 23
23 24 25 26 27 28 29    27 28 29 30 31                24 25 26 27 28 29 30
30 31

  Oktober          November          Dezember
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
 1  2  3  4  5  6  7          1  2  3  4          1  2
 8  9 10 11 12 13 14    5  6  7  8  9 10 11    3  4  5  6  7  8  9
15 16 17 18 19 20 21    12 13 14 15 16 17 18    10 11 12 13 14 15 16
22 23 24 25 26 27 28    19 20 21 22 23 24 25    17 18 19 20 21 22 23
29 30 31                26 27 28 29 30                24 25 26 27 28 29 30
31
```

19. cal 2018

```

onworks@onworks-Standard-PC-l440FX-PIIX-1996:~$ cal 2018
                2018
   Januar          Februar          März
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
   1  2  3  4  5  6           1  2  3           1  2  3
  7  8  9 10 11 12 13    4  5  6  7  8  9 10    4  5  6  7  8  9 10
14 15 16 17 18 19 20   11 12 13 14 15 16 17   11 12 13 14 15 16 17
21 22 23 24 25 26 27   18 19 20 21 22 23 24   18 19 20 21 22 23 24
28 29 30 31           25 26 27 28           25 26 27 28 29 30 31

   April          Mai          Juni
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
  1  2  3  4  5  6  7           1  2  3  4  5           1  2
  8  9 10 11 12 13 14    6  7  8  9 10 11 12    3  4  5  6  7  8  9
15 16 17 18 19 20 21   13 14 15 16 17 18 19   10 11 12 13 14 15 16
22 23 24 25 26 27 28   20 21 22 23 24 25 26   17 18 19 20 21 22 23
29 30           27 28 29 30 31           24 25 26 27 28 29 30

   Juli          August          September
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
  1  2  3  4  5  6  7           1  2  3  4           1
  8  9 10 11 12 13 14    5  6  7  8  9 10 11    2  3  4  5  6  7  8
15 16 17 18 19 20 21   12 13 14 15 16 17 18    9 10 11 12 13 14 15
22 23 24 25 26 27 28   19 20 21 22 23 24 25   16 17 18 19 20 21 22
29 30 31           26 27 28 29 30 31           23 24 25 26 27 28 29
                                           30

   Oktober          November          Dezember
So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa So Mo Di Mi Do Fr Sa
   1  2  3  4  5  6           1  2  3           1
  7  8  9 10 11 12 13    4  5  6  7  8  9 10    2  3  4  5  6  7  8
14 15 16 17 18 19 20   11 12 13 14 15 16 17    9 10 11 12 13 14 15
21 22 23 24 25 26 27   18 19 20 21 22 23 24   16 17 18 19 20 21 22
28 29 30 31           25 26 27 28 29 30           23 24 25 26 27 28 29
                                           30 31

```

20. passwd

```

harsh@HP-Pavilion:~/lab1$ passwd
Changing password for harsh.
Current password:
New password:
Retype new password:
passwd: password updated successfully

```

21. grep

```

harsh@HP-Pavilion:~/lab1$ grep "This is" file1.txt
This is file1

```

22. free

```
harsh@HP-Pavilion:~/lab1$ free
              total        used        free      shared  buff/cache   availa
ble
Mem:          3911656      333872      3345196         2512       232588       3364
352
Swap:         1048576           0       1048576
```

23. uname

```
harsh@HP-Pavilion:~/lab1$ uname
Linux
```

24. uname -a

```
harsh@HP-Pavilion:~/lab1$ uname -a
Linux HP-Pavilion 5.15.79.1-microsoft-standard-WSL2 #1 SMP Wed Nov 23 01:01:4
6 UTC 2022 x86_64 x86_64 x86_64 GNU/Linux
```

25. uname -s

```
harsh@HP-Pavilion:~/lab1$ uname -s
Linux
```

26. uname -n

```
harsh@HP-Pavilion:~/lab1$ uname -n
HP-Pavilion
```

27. group

```
harsh@HP-Pavilion:~/lab1$ groups
harsh adm dialout cdrom floppy sudo audio dip video plugdev netdev
```

28. comm

```
harsh@HP-Pavilion:~/lab1$ comm file1.txt file2.txt
This is file1
      This is file2
```

29. date

```
harsh@HP-Pavilion:~/lab1$ date
Mon Jan  9 13:17:50 IST 2023
```

30. date-d

```
harsh@HP-Pavilion:~/lab1$ date
Mon Jan  9 13:17:50 IST 2023
```

31. chmod

```
harsh@HP-Pavilion:~/lab1$ chmod +r file1.txt
```

32. wc

```
harsh@HP-Pavilion:~/lab1$ wc file1.txt
 1  3 14 file1.txt
```