```
devesh@Dev:~$ ls
cdac   dev1.txt  dev2.txt  dev3.txt   dir1   dir2   dir3   dir4
devesh@Dev:~$ cd dir1
devesh@Dev:~/dir1$ cd ..
devesh@Dev:~$ gzip dev3.txt
devesh@Dev:~$ ls -ltr
total 28
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:26 dir4
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:38 dir1
-rw-r--r-- 1 devesh devesh    0 Apr 12 23:41 dev1.txt
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:43 dir3
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:45 dir2
-rw-r--r-- 1 devesh devesh   77 Apr 12 23:48 dev2.txt
-rw-r--r-- 1 devesh devesh  483 Apr 12 23:53 dev3.txt.gz
drwxr-xr-x 2 devesh devesh 4096 Apr 13 12:24 cdac
devesh@Dev:~$ gunzip dev3.txt
devesh@Dev:~$ ls -ltr
total 28
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:26 dir4
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:38 dir1
-rw-r--r-- 1 devesh devesh    0 Apr 12 23:41 dev1.txt
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:43 dir3
drwxr-xr-x 2 devesh devesh 4096 Apr 12 23:45 dir2
-rw-r--r-- 1 devesh devesh   77 Apr 12 23:48 dev2.txt
-rw-r--r-- 1 devesh devesh  906 Apr 12 23:53 dev3.txt
drwxr-xr-x 2 devesh devesh 4096 Apr 13 12:24 cdac
devesh@Dev:~$ tar cvf archive.tar cdac
cdac/
```

```
drwxr-xr-x 2 devesh devesh 4096 Apr 13 12:24 cdac
devesh@Dev:~$ tar cvf archive.tar cdac
cdac/
cdac/sub1.txt
cdac/sub.txt
cdac/sub2.txt
devesh@Dev:~$ pwd
/home/devesh
devesh@Dev:~$ cd dir3
devesh@Dev:~/dir3$ mkdir new
devesh@Dev:~/dir3$ cd new
devesh@Dev:~/dir3/new$ touch one.txt two.txt
devesh@Dev:~/dir3/new$ vi one.txt
devesh@Dev:~/dir3/new$ tar cvf newone.tar new
tar: new: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
devesh@Dev:~/dir3/new$ tar cvf newone.tar dir3
tar: dir3: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
devesh@Dev:~/dir3/new$ cd ..
devesh@Dev:~/dir3$ cd ..
devesh@Dev:~$ tar cvf newone.tar dir3
dir3/
dir3/new/
dir3/new/newone.tar
dir3/new/one.txt
dir3/new/two.txt
dir3/dev1.txt
```

```
devesh@Dev:~$ tar -tvf one.txt
tar: one.txt: Cannot open: No such file or directory
tar: Error is not recoverable: exiting now
devesh@Dev:~$ tar -tvf newone.tar
drwxr-xr-x devesh/devesh      0 2023-04-13 12:38 dir3/
drwxr-xr-x devesh/devesh      0 2023-04-13 12:42 dir3/new/
-rw-r--r-- devesh/devesh 10240 2023-04-13 12:42 dir3/new/ne
wone.tar
-rw-r--r-- devesh/devesh   257 2023-04-13 12:41 dir3/new/on
e.txt-rw-r--r-- devesh/devesh      0 2023-04-13 12:39 dir3/n
ew/two.txt-rw-r--r-- devesh/devesh      0 2023-04-12 23:43 d
ir3/dev1.txt
devesh@Dev:~$ tar -xvf archive.tar
cdac/
cdac/sub1.txt
cdac/sub.txt
cdac/sub2.txt
devesh@Dev:~$ rm archive.tar
devesh@Dev:~$ tar -zcvf archive.tgz cdac
cdac/
cdac/sub1.txt
cdac/sub.txt
cdac/sub2.txt
devesh@Dev:~$ ls -ltr
total 52
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:26 dir4
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:38 dir1
-rw-r--r-- 1 devesh devesh     0 Apr 12 23:41 dev1.txt
```

```
devesh@Dev:~$ ls -ltr
total 52
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:26 dir4
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:38 dir1
-rw-r--r-- 1 devesh devesh     0 Apr 12 23:41 dev1.txt
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:45 dir2
-rw-r--r-- 1 devesh devesh    77 Apr 12 23:48 dev2.txt
-rw-r--r-- 1 devesh devesh   906 Apr 12 23:53 dev3.txt
drwxr-xr-x 2 devesh devesh  4096 Apr 13 12:24 cdac
drwxr-xr-x 3 devesh devesh  4096 Apr 13 12:38 dir3
-rw-r--r-- 1 devesh devesh 20480 Apr 13 12:43 newone.tar
-rw-r--r-- 1 devesh devesh   164 Apr 13 12:48 archive.tgz
devesh@Dev:~$ echo devesh
devesh
devesh@Dev:~$ printf("it is used to print")
-bash: syntax error near unexpected token `"it is used to p
rint"'
devesh@Dev:~$ printf "it is used to print"
it is used to printdevesh@Dev:~$ printf "it is used to prin
t\n"
it is used to print
devesh@Dev:~$ ls -l
total 52
-rw-r--r-- 1 devesh devesh   164 Apr 13 12:48 archive.tgz
drwxr-xr-x 2 devesh devesh  4096 Apr 13 12:24 cdac
-rw-r--r-- 1 devesh devesh     0 Apr 12 23:41 dev1.txt
-rw-r--r-- 1 devesh devesh    77 Apr 12 23:48 dev2.txt
-rw-r--r-- 1 devesh devesh   906 Apr 12 23:53 dev3.txt
```

```
devesh@Dev:~$ ls -l
total 52
-rw-r--r-- 1 devesh devesh   164 Apr 13 12:48 archive.tgz
drwxr-xr-x 2 devesh devesh  4096 Apr 13 12:24 cdac
-rw-r--r-- 1 devesh devesh     0 Apr 12 23:41 dev1.txt
-rw-r--r-- 1 devesh devesh    77 Apr 12 23:48 dev2.txt
-rw-r--r-- 1 devesh devesh   906 Apr 12 23:53 dev3.txt
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:38 dir1
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:45 dir2
drwxr-xr-x 3 devesh devesh  4096 Apr 13 12:38 dir3
drwxr-xr-x 2 devesh devesh  4096 Apr 12 23:26 dir4
-rw-r--r-- 1 devesh devesh 20480 Apr 13 12:43 newone.tar
devesh@Dev:~$ awk '{print NR}' names
awk: fatal: cannot open file 'names' for reading: No such f
ile or directory
devesh@Dev:~$ awk '{print NR}' dev1.txt
devesh@Dev:~$ awk '{print NR}' dev2.txt
1
2
3
4
5
6
7
8
9
10
11
```
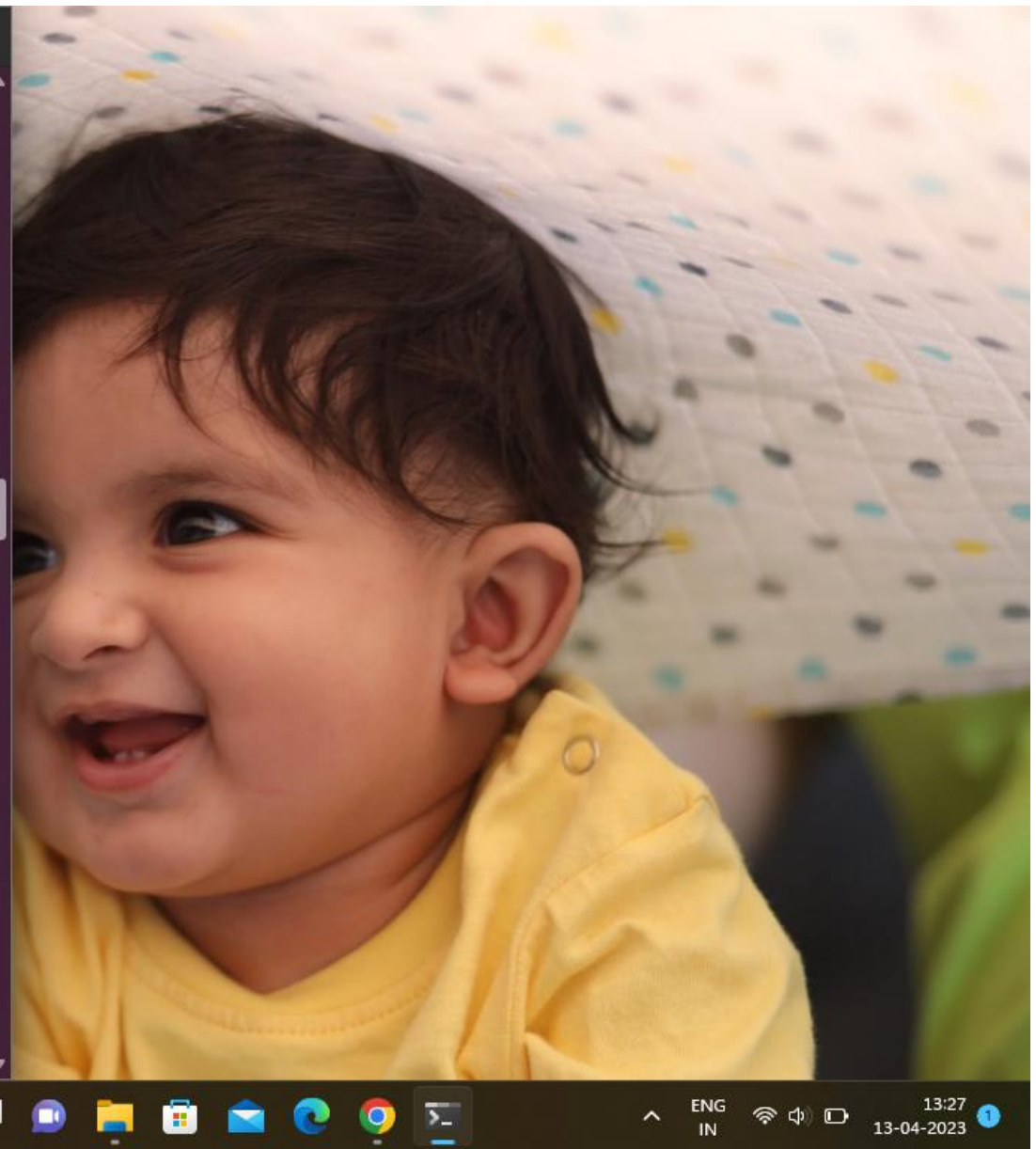
```
devesh@Dev:~$ awk '{print NR $0}' dev2.txt
1Devesh
2Suraj
3Cdac
4Engineering
5Electrical
6Mechanical
7Civil
8It
9Cs
10EnTC
11Branch
12
devesh@Dev:~$ awk '{print NR, $0}' dev2.txt
1 Devesh
2 Suraj
3 Cdac
4 Engineering
5 Electrical
6 Mechanical
7 Civil
8 It
9 Cs
10 EnTC
11 Branch
12
devesh@Dev:~$ awk '{print NR "- "  $0}' dev2.txt
1- Devesh
```

```
devesh@Dev:~$ awk '{print NR "- "  $0}' dev2.txt
1- Devesh
2- Suraj
3- Cdac
4- Engineering
5- Electrical
6- Mechanical
7- Civil
8- It
9- Cs
10- EnTC
11- Branch
12-
devesh@Dev:~$ awk '{if($1>D) print $0}' dev2.txt
Devesh
Suraj
Cdac
Engineering
Electrical
Mechanical
Civil
It
Cs
EnTC
Branch
devesh@Dev:~$ awk '{if($1=="Suraj") print $0}' dev2.txt
Suraj
devesh@Dev:~$ awk '{if($1=="Branch"){$1="Edited"} print $0}
```

```
devesh@Dev:~$ awk '{if($1=="Branch"){$1="Edited"} print $0}
' dev2.txt
Devesh
Suraj
Cdac
Engineering
Electrical
Mechanical
Civil
It
Cs
EnTC
Edited

devesh@Dev:~$ awk '/ICC/ { print $}' dev3.txt
awk: cmd. line:1: /ICC/ { print $}
awk: cmd. line:1:                  ^ syntax error
devesh@Dev:~$ awk '/ICC/ {print $}' dev3.txt
awk: cmd. line:1: /ICC/ {print $}
awk: cmd. line:1:                 ^ syntax error
devesh@Dev:~$ awk '/ICC/ {print $0}' dev3.txt
Virat Kohli is an Indian cricketer and former captain of th
e Indian national team. He is considered one of the best ba
tsmen in the world and holds several records in cricket. He
 made his international debut in 2008 and has since then re
presented India in all three formats of the game. He has be
en a consistent performer for India and has been the backbo
ne of the Indian batting line-up. In 2013, he was appointed
```

```
devesh@Dev:~$ awk '/ICC/ {print $0}' dev3.txt
Virat Kohli is an Indian cricketer and former captain of th
e Indian national team. He is considered one of the best ba
tsmen in the world and holds several records in cricket. He
 made his international debut in 2008 and has since then re
presented India in all three formats of the game. He has be
en a consistent performer for India and has been the backbo
ne of the Indian batting line-up. In 2013, he was appointed
 as the vice-captain of the ODI team and became the captain
 of the team in 2017. Under his captaincy, India has reache
d several milestones including becoming the number-one team
 in Test cricket and reaching the final of the 2017 ICC Cha
mpions Trophy. He has also been honoured with several award
s for his performances including the Sir Garfield Sobers Tr
ophy for ICC ODI Player of the Year in 2017 and 2018. He is
 known for his aggressive captaincy and his never-say-die a
ttitude on the field
devesh@Dev:~$ awk 'NR=="5" {print $0}' dev3.txt
devesh@Dev:~$ awk 'NR=="5" {print $0}' dev2.txt
Electrical
devesh@Dev:~$ awk 'NR=="5",NR=="7" {print $0}' dev2.txt
Electrical
Mechanical
Civil
devesh@Dev:~$ awk 'BEGIN {for(i=0;i<=5;i++) print i;}'
0
1
2
```

```
devesh@Dev:~$ awk 'BEGIN {for(i=0;i<=5;i++) print i;}'
0
1
2
3
4
5
devesh@Dev:~$ awk 'BEGIN {while(i<5){i++;  print "Hello";}}
'
Hello
Hello
Hello
Hello
Hello
devesh@Dev:~$ cat dev2.txt
Devesh
Suraj
Cdac
Engineering
Electrical
Mechanical
Civil
It
Cs
EnTC
Branch

devesh@Dev:~$ cut -c1 dev2.txt
```

```
devesh@Dev:~$ cut -c1 dev2.txt
D
S
C
E
E
M
C
I
C
E
B

devesh@Dev:~$ cut -c1,3 dev2.txt
Dv
Sr
Ca
Eg
Ee
Mc
Cv
I
C
ET
Ba

devesh@Dev:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
```
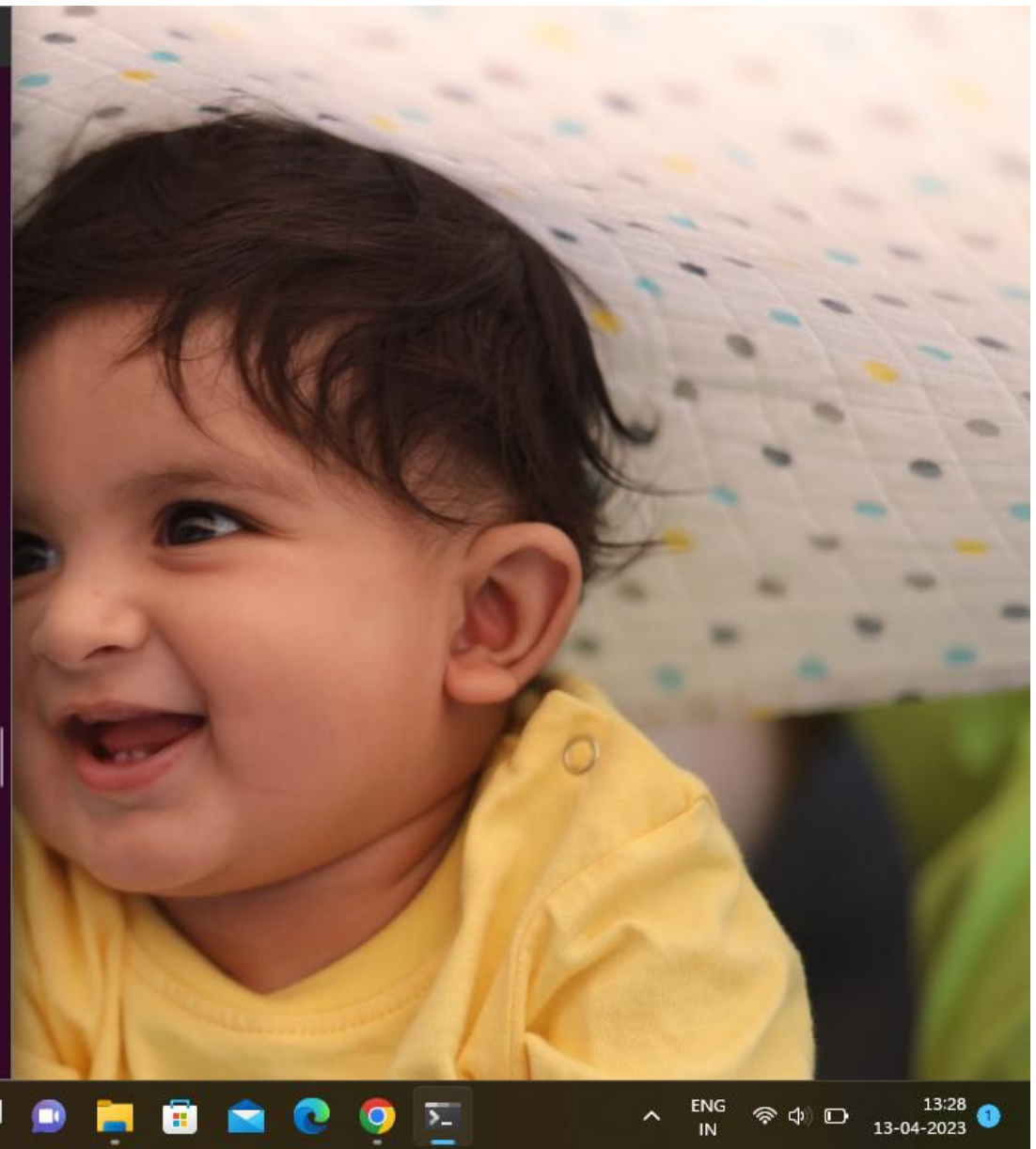
```
devesh@Dev:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
none            905M  4.0K  905M   1% /mnt/wsl
none            151G   68G   84G  45% /usr/lib/wsl/drivers
none            905M     0  905M   0% /usr/lib/wsl/lib
/dev/sdc       1007G  1.1G  955G   1% /
none            905M  4.7M  900M   1% /mnt/wslg
rootfs          901M  1.9M  900M   1% /init
none            905M     0  905M   0% /run
none            905M     0  905M   0% /run/lock
none            905M     0  905M   0% /run/shm
none            905M     0  905M   0% /run/user
none            905M   68K  905M   1% /mnt/wslg/versions.tx
t
none            905M   68K  905M   1% /mnt/wslg/doc
drvfs           151G   68G   84G  45% /mnt/c
drvfs           261G   42G  219G  16% /mnt/d
drvfs           261G   29G  232G  11% /mnt/e
drvfs           261G   83G  178G  32% /mnt/f
devesh@Dev:~$ df -h -BK
Filesystem      1K-blocks       Used   Available Use% Mount
ed on
none            925788K           4K     925784K   1% /mnt/
wsl
none         157955124K    70388252K   87566872K  45% /usr/
lib/wsl/drivers
none            925788K           0K     925788K   0% /usr/
```

```
devesh@Dev:~$ df -h -BK
Filesystem        1K-blocks        Used    Available Use% Mount
ed on
none               925788K           4K      925784K   1% /mnt/
wsl
none            157955124K   70388252K    87566872K  45% /usr/
lib/wsl/drivers
none               925788K           0K      925788K   0% /usr/
lib/wsl/lib
/dev/sdc       1055762868K    1053112K  1001006284K   1% /
none               925788K        4724K      921064K   1% /mnt/
wslg
rootfs             922544K        1936K      920608K   1% /init
none               925788K           0K      925788K   0% /run
none               925788K           0K      925788K   0% /run/
lock
none               925788K           0K      925788K   0% /run/
shm
none               925788K           0K      925788K   0% /run/
user
none               925788K          68K      925720K   1% /mnt/
wslg/versions.txt
none               925788K          68K      925720K   1% /mnt/
wslg/doc
drvfs           157955124K   70388252K    87566872K  45% /mnt/
c
drvfs           272679932K   43143272K   229536660K  16% /mnt/
d
```

```
f
devesh@Dev:~$ du-h
du-h: command not found
devesh@Dev:~$ du -h
12K     ./dir1
4.0K    ./cdac
4.0K    ./dir4
4.0K    ./.config/procps
8.0K    ./.config
20K     ./dir3/new
24K     ./dir3
4.0K    ./dir2
120K    .
devesh@Dev:~$ sudo demidecode -t bios
[sudo] password for devesh:
sudo: demidecode: command not found
devesh@Dev:~$ groupadd Friends
groupadd: Permission denied.
groupadd: cannot lock /etc/group; try again later.
devesh@Dev:~$ lsblk -a
NAME   MAJ:MIN RM   SIZE RO TYPE MOUNTPOINTS
ram0    1:0    0    64M  0 disk
ram1    1:1    0    64M  0 disk
ram2    1:2    0    64M  0 disk
ram3    1:3    0    64M  0 disk
ram4    1:4    0    64M  0 disk
ram5    1:5    0    64M  0 disk
ram6    1:6    0    64M  0 disk
```

```
ram7     1:7    0    64M   0 disk
ram8     1:8    0    64M   0 disk
ram9     1:9    0    64M   0 disk
ram10    1:10   0    64M   0 disk
ram11    1:11   0    64M   0 disk
ram12    1:12   0    64M   0 disk
ram13    1:13   0    64M   0 disk
ram14    1:14   0    64M   0 disk
ram15    1:15   0    64M   0 disk
loop0    7:0    0     0B   0 loop
loop1    7:1    0     0B   0 loop
loop2    7:2    0     0B   0 loop
loop3    7:3    0     0B   0 loop
loop4    7:4    0     0B   0 loop
loop5    7:5    0     0B   0 loop
loop6    7:6    0     0B   0 loop
loop7    7:7    0     0B   0 loop
sda      8:0    0 363.3M   1 disk
sdb      8:16   0     1G   0 disk [SWAP]
sdc      8:32   0     1T   0 disk /mnt/wslg/distro
                                  /

devesh@Dev:~$ lsblk -b
NAME MAJ:MIN RM           SIZE RO TYPE MOUNTPOINTS
sda      8:0    0     380968960  1 disk
sdb      8:16   0    1073745920  0 disk [SWAP]
sdc      8:32   0 1099511627776  0 disk /mnt/wslg/distro
                                        /

devesh@Dev:~$
```