

## **Changing File Permission**

### **Relative mode of Manipulating File Permission using chmod command**

```
student@student-V520-15IKL:~$ mkdir file_permission
student@student-V520-15IKL:~$ cd file_permission

student@student-V520-15IKL:~/file_permission$ cat > file1.txt
echo "Welcome to CSDEPT"

student@student-V520-15IKL:~/file_permission$ cat file1.txt
echo "Welcome to CSDEPT"

student@student-V520-15IKL:~/file_permission$ ./file1.txt
bash: ./file1.txt: Permission denied

student@student-V520-15IKL:~/file_permission$ ls -lah
total 12K
drwxr-xr-x  2 student student 4.0K Feb 17 16:38 .
drwxr-xr-x 71 student student 4.0K Feb 17 16:37 ..
-rw-r--r--  1 student student  26 Feb 17 16:39 file1.txt

student@student-V520-15IKL:~/file_permission $ chmod ugo+x file1.txt

student@student-V520-15IKL:~/file_permission$ ./file1.txt
Welcome to CSDEPT
```

### **Absolute mode of Manipulating File Permission using chmod command**

```
student@student-V520-15IKL:~/file_permission$ cat > file2.txt
echo "Welcome to CSDEPT"

student@student-V520-15IKL:~/file_permission$ cat file2.txt
echo "Welcome to CSDEPT"

student@student-V520-15IKL:~/file_permission$ ./file2.txt
bash: ./file2.txt: Permission denied

student@student-V520-15IKL:~/file_permission$ ls -lah
total 16K
drwxr-xr-x  2 student student 4.0K Feb 17 16:42 .
drwxr-xr-x 71 student student 4.0K Feb 17 16:37 ..
-rw-r--r--  1 student student  26 Feb 17 16:39 file1.txt
-rw-r--r--  1 student student  25 Feb 17 16:42 file2.txt

student@student-V520-15IKL:~/file_permission$ chmod 777 file2.txt

student@student-V520-15IKL:~/file_permission$ ls -lah
total 16K
drwxr-xr-x  2 student student 4.0K Feb 17 16:42 .
drwxr-xr-x 71 student student 4.0K Feb 17 16:37 ..
-rw-r--r--  1 student student  26 Feb 17 16:39 file1.txt
-rwxrwxrwx  1 student student  25 Feb 17 16:42 file2.txt

student@student-V520-15IKL:~/file_permission$ ./file2.txt
bash: ./file2.txt: Text file busy
```

## Process related command

```
student@student-V520-15IKL:~$ xcalc&
[1] 2316
```

```
student@student-V520-15IKL:~$ Warning: cannot convert string "-adobe-
symbol-*-*-*-*-*-*-*120-*-*-*-*-*-*" to type FontStruct
```

```
student@student-V520-15IKL:~$ fg % 2
xcalc
```

```
student@student-V520-15IKL:~$ firefox&
[2] 2416
```

```
student@student-V520-15IKL:~$
(process:2416) : Glib-CRITICAL **: g_slice_set_config: assertion
sys_page_size == 0' failed
```

```
student@student-V520-15IKL:~$ mkdir tpc
student@student-V520-15IKL:~$ cd tpc
```

```
student@student-V520-15IKL:~/tpc$ ps
  PID TTY          TIME CMD
 1891 pts/1    00:00:00 bash
 1923 pts/1    00:00:00 cat
 1969 pts/1    00:00:00 cat
 2314 pts/1    00:00:00 ps
```

```
student@student-V520-15IKL:~/tpc$ ps -f
UID          PID  PPID  C STIME TTY          TIME CMD
student    1891   1878  0 16:37 pts/1    00:00:00 bash
student    1923   1891  0 16:38 pts/1    00:00:00 cat
student    1969   1891  0 16:42 pts/1    00:00:00 cat
student    2315   1891  0 17:02 pts/1    00:00:00 ps -f
```

```
student@student-V520-15IKL:~/tpc$ ps -e
  PID TTY          TIME CMD
    1 ?           00:00:00 systemd
    2 ?           00:00:00 kthreadd
    4 ?           00:00:00 kworker/0:0H
    6 ?           00:00:00 mm_percpu_wq
    7 ?           00:00:00 ksoftirqd/0
    8 ?           00:00:01 rcu_sched
    9 ?           00:00:00 rcu_bh
   10 ?           00:00:00 migration/0
   11 ?           00:00:00 watchdog/0
   12 ?           00:00:00 cpuhp/0
   13 ?           00:00:00 cpuhp/1
   14 ?           00:00:00 watchdog/1
   15 ?           00:00:00 migration/1
   16 ?           00:00:00 ksoftirqd/1
   18 ?           00:00:00 kworker/1:0H
   19 ?           00:00:00 cpuhp/2
   20 ?           00:00:00 watchdog/2
   21 ?           00:00:00 migration/2
   22 ?           00:00:00 ksoftirqd/2
   24 ?           00:00:00 kworker/2:0H
```

```

25 ?      00:00:00 cpuhp/3
26 ?      00:00:00 watchdog/3
27 ?      00:00:00 migration/3
28 ?      00:00:00 ksoftirqd/3
30 ?      00:00:00 kworker/3:0H
31 ?      00:00:00 kdevtmpfs
32 ?      00:00:00 netns
33 ?      00:00:00 rcu_tasks_kthre
34 ?      00:00:00 kauditd
36 ?      00:00:00 kworker/1:1
37 ?      00:00:00 khungtaskd
38 ?      00:00:00 oom_reaper
39 ?      00:00:00 writeback
40 ?      00:00:00 kcompactd0
41 ?      00:00:00 ksm
42 ?      00:00:00 khugepaged
43 ?      00:00:00 crypto
44 ?      00:00:00 kintegrityd
45 ?      00:00:00 kblockd
47 ?      00:00:00 kworker/3:1
48 ?      00:00:00 ata_sff
49 ?      00:00:00 md
50 ?      00:00:00 edac-poller
51 ?      00:00:00 devfreq_wq
2026 ?    00:00:00 kworker/u8:0
2030 ?    00:00:00 kworker/3:2
2031 ?    00:00:00 kworker/1:0
2035 ?    00:00:00 kworker/2:1
2036 ?    00:00:00 kworker/0:1
2037 ?    00:00:00 kworker/u8:1
2295 ?    00:00:00 kworker/u8:2
2296 ?    00:00:00 kworker/3:0
2305 ?    00:00:00 kworker/2:2
2307 ?    00:00:00 kworker/1:2
2311 ?    00:00:00 kworker/0:0
2316 pts/1 00:00:00 ps

```

```
student@student-V520-15IKL:~/tpc$ ps -ef
```

UID	PID	PPID	C	STIME	TTY	TIME	CMD
root	1	0	0	16:30	?	00:00:00	/sbin/init splash
root	2	0	0	16:30	?	00:00:00	[kthreadd]
root	4	2	0	16:30	?	00:00:00	[kworker/0:0H]
root	6	2	0	16:30	?	00:00:00	[mm_percpu_wq]
root	7	2	0	16:30	?	00:00:00	[ksoftirqd/0]
root	8	2	0	16:30	?	00:00:01	[rcu_sched]
root	9	2	0	16:30	?	00:00:00	[rcu_bh]
root	10	2	0	16:30	?	00:00:00	[migration/0]
root	11	2	0	16:30	?	00:00:00	[watchdog/0]
root	12	2	0	16:30	?	00:00:00	[cpuhp/0]
root	13	2	0	16:30	?	00:00:00	[cpuhp/1]
root	14	2	0	16:30	?	00:00:00	[watchdog/1]
root	15	2	0	16:30	?	00:00:00	[migration/1]
root	16	2	0	16:30	?	00:00:00	[ksoftirqd/1]
root	18	2	0	16:30	?	00:00:00	[kworker/1:0H]
root	19	2	0	16:30	?	00:00:00	[cpuhp/2]
root	20	2	0	16:30	?	00:00:00	[watchdog/2]
root	21	2	0	16:30	?	00:00:00	[migration/2]
root	22	2	0	16:30	?	00:00:00	[ksoftirqd/2]

root	24	2	0	16:30	?	00:00:00	[kworker/2:0H]
root	25	2	0	16:30	?	00:00:00	[cpuhp/3]
root	26	2	0	16:30	?	00:00:00	[watchdog/3]
root	27	2	0	16:30	?	00:00:00	[migration/3]
root	28	2	0	16:30	?	00:00:00	[ksoftirqd/3]
root	30	2	0	16:30	?	00:00:00	[kworker/3:0H]
root	31	2	0	16:30	?	00:00:00	[kdevtmpfs]
root	32	2	0	16:30	?	00:00:00	[netns]
root	33	2	0	16:30	?	00:00:00	[rcu_tasks_kthre]
root	34	2	0	16:30	?	00:00:00	[kauditd]
root	36	2	0	16:30	?	00:00:00	[kworker/1:1]
root	37	2	0	16:30	?	00:00:00	[khungtaskd]
root	38	2	0	16:30	?	00:00:00	[oom_reaper]
root	39	2	0	16:30	?	00:00:00	[writeback]
root	40	2	0	16:30	?	00:00:00	[kcompactd0]
root	41	2	0	16:30	?	00:00:00	[ksmd]
root	42	2	0	16:30	?	00:00:00	[khugepaged]
root	43	2	0	16:30	?	00:00:00	[crypto]
root	44	2	0	16:30	?	00:00:00	[kintegrityd]
root	45	2	0	16:30	?	00:00:00	[kblockd]
root	47	2	0	16:30	?	00:00:00	[kworker/3:1]
root	48	2	0	16:30	?	00:00:00	[ata_sff]
root	49	2	0	16:30	?	00:00:00	[md]
root	50	2	0	16:30	?	00:00:00	[edac-poller]
root	51	2	0	16:30	?	00:00:00	[devfreq_wq]
root	52	2	0	16:30	?	00:00:00	[watchdogd]
root	55	2	0	16:30	?	00:00:00	[kswapd0]
root	56	2	0	16:30	?	00:00:00	[kworker/u9:0]
root	57	2	0	16:30	?	00:00:00	[ecryptfs-kthrea]
root	99	2	0	16:30	?	00:00:00	[kthrotld]
root	100	2	0	16:30	?	00:00:00	[acpi_thermal_pm]
root	104	2	0	16:30	?	00:00:00	[ipv6_addrconf]
root	113	2	0	16:30	?	00:00:00	[kstrp]
root	130	2	0	16:30	?	00:00:00	[charger_manager]
root	178	2	0	16:30	?	00:00:00	[scsi_eh_0]
root	179	2	0	16:30	?	00:00:00	[scsi_tmf_0]
root	180	2	0	16:30	?	00:00:00	[scsi_eh_1]
root	181	2	0	16:30	?	00:00:00	[scsi_tmf_1]
root	182	2	0	16:30	?	00:00:00	[scsi_eh_2]
root	183	2	0	16:30	?	00:00:00	[scsi_tmf_2]
root	184	2	0	16:30	?	00:00:00	[scsi_eh_3]
root	185	2	0	16:30	?	00:00:00	[scsi_tmf_3]
root	186	2	0	16:30	?	00:00:00	[scsi_eh_4]
root	187	2	0	16:30	?	00:00:00	[scsi_tmf_4]
root	188	2	0	16:30	?	00:00:00	[scsi_eh_5]
root	189	2	0	16:30	?	00:00:00	[scsi_tmf_5]
root	192	2	0	16:30	?	00:00:00	[kworker/u8:5]
root	194	2	0	16:30	?	00:00:00	[i915/signal:0]
root	195	2	0	16:30	?	00:00:00	[i915/signal:1]
root	196	2	0	16:30	?	00:00:00	[i915/signal:2]
root	197	2	0	16:30	?	00:00:00	[i915/signal:4]
root	201	2	0	16:30	?	00:00:00	[kworker/1:1H]
root	203	2	0	16:30	?	00:00:00	[kworker/3:1H]
root	303	2	0	16:30	?	00:00:00	[jbd2/sda4-8]
root	304	2	0	16:30	?	00:00:00	[ext4-rsv-conver]
root	319	2	0	16:30	?	00:00:00	[kworker/2:1H]
root	351	1	0	16:30	?	00:00:00	/lib/systemd/systemd-

journalld

```

root      376      1  0 16:30 ?          00:00:00 /sbin/lvmetad -f
root      377      1  0 16:30 ?          00:00:00 /lib/systemd/systemd-
root      672      1  0 16:30 ?          00:00:00 /usr/sbin/cron -f
root     2026      2  0 16:51 ?          00:00:00 [kworker/u8:0]
root     2030      2  0 16:54 ?          00:00:00 [kworker/3:2]
root     2031      2  0 16:54 ?          00:00:00 [kworker/1:0]
root     2035      2  0 16:55 ?          00:00:00 [kworker/2:1]
root     2036      2  0 16:56 ?          00:00:00 [kworker/0:1]
root     2037      2  0 16:56 ?          00:00:00 [kworker/u8:1]
root     2295      2  0 16:59 ?          00:00:00 [kworker/u8:2]
root     2296      2  0 16:59 ?          00:00:00 [kworker/3:0]
root     2305      2  0 17:00 ?          00:00:00 [kworker/2:2]
root     2307      2  0 17:01 ?          00:00:00 [kworker/1:2]
root     2311      2  0 17:01 ?          00:00:00 [kworker/0:0]
student   2319   1891  0 17:03 pts/1      00:00:00 ps -ef

```

```
student@student-V520-15IKL:~/tpc$ ps -ef
```

```

UID      PID  PPID  C  STIME TTY          TIME CMD
root         1      0  0 16:30 ?          00:00:00 /sbin/init splash
root         2      0  0 16:30 ?          00:00:00 [kthreadd]
root         4      2  0 16:30 ?          00:00:00 [kworker/0:0H]
root         6      2  0 16:30 ?          00:00:00 [mm_percpu_wq]
root         7      2  0 16:30 ?          00:00:00 [ksoftirqd/0]
root         8      2  0 16:30 ?          00:00:01 [rcu_sched]
root         9      2  0 16:30 ?          00:00:00 [rcu_bh]
root        10      2  0 16:30 ?          00:00:00 [migration/0]
root        11      2  0 16:30 ?          00:00:00 [watchdog/0]
root        12      2  0 16:30 ?          00:00:00 [cpuhp/0]
root        13      2  0 16:30 ?          00:00:00 [cpuhp/1]
root        14      2  0 16:30 ?          00:00:00 [watchdog/1]
root        15      2  0 16:30 ?          00:00:00 [migration/1]
root        16      2  0 16:30 ?          00:00:00 [ksoftirqd/1]
root        18      2  0 16:30 ?          00:00:00 [kworker/1:0H]
root        19      2  0 16:30 ?          00:00:00 [cpuhp/2]
root        20      2  0 16:30 ?          00:00:00 [watchdog/2]
root        21      2  0 16:30 ?          00:00:00 [migration/2]
root        22      2  0 16:30 ?          00:00:00 [ksoftirqd/2]
root        24      2  0 16:30 ?          00:00:00 [kworker/2:0H]
root        25      2  0 16:30 ?          00:00:00 [cpuhp/3]
root        26      2  0 16:30 ?          00:00:00 [watchdog/3]
root        27      2  0 16:30 ?          00:00:00 [migration/3]
root        28      2  0 16:30 ?          00:00:00 [ksoftirqd/3]
root        30      2  0 16:30 ?          00:00:00 [kworker/3:0H]
root        31      2  0 16:30 ?          00:00:00 [kdevtmpfs]
root        32      2  0 16:30 ?          00:00:00 [netns]
root        33      2  0 16:30 ?          00:00:00 [rcu_tasks_kthre]
root        34      2  0 16:30 ?          00:00:00 [kauditd]
root        36      2  0 16:30 ?          00:00:00 [kworker/1:1]
root        37      2  0 16:30 ?          00:00:00 [khungtaskd]
root        38      2  0 16:30 ?          00:00:00 [oom_reaper]
root        39      2  0 16:30 ?          00:00:00 [writeback]
root        40      2  0 16:30 ?          00:00:00 [kcompactd0]
root        41      2  0 16:30 ?          00:00:00 [ksmd]
root        42      2  0 16:30 ?          00:00:00 [khugepaged]
root        43      2  0 16:30 ?          00:00:00 [crypto]
root        44      2  0 16:30 ?          00:00:00 [kintegrityd]
root        45      2  0 16:30 ?          00:00:00 [kblockd]

```

root	47	2	0	16:30	?	00:00:00	[kworker/3:1]
root	48	2	0	16:30	?	00:00:00	[ata_sff]
root	49	2	0	16:30	?	00:00:00	[md]
root	50	2	0	16:30	?	00:00:00	[edac-poller]
root	51	2	0	16:30	?	00:00:00	[devfreq_wq]
root	52	2	0	16:30	?	00:00:00	[watchdogd]
root	55	2	0	16:30	?	00:00:00	[kswapd0]
root	56	2	0	16:30	?	00:00:00	[kworker/u9:0]
root	57	2	0	16:30	?	00:00:00	[ecryptfs-kthrea]
root	99	2	0	16:30	?	00:00:00	[kthrotld]
root	100	2	0	16:30	?	00:00:00	[acpi_thermal_pm]
root	104	2	0	16:30	?	00:00:00	[ipv6_addrconf]
root	113	2	0	16:30	?	00:00:00	[kstrp]
root	130	2	0	16:30	?	00:00:00	[charger_manager]
root	178	2	0	16:30	?	00:00:00	[scsi_eh_0]
root	179	2	0	16:30	?	00:00:00	[scsi_tmf_0]
root	180	2	0	16:30	?	00:00:00	[scsi_eh_1]
root	181	2	0	16:30	?	00:00:00	[scsi_tmf_1]
root	182	2	0	16:30	?	00:00:00	[scsi_eh_2]
root	183	2	0	16:30	?	00:00:00	[scsi_tmf_2]
root	184	2	0	16:30	?	00:00:00	[scsi_eh_3]
root	185	2	0	16:30	?	00:00:00	[scsi_tmf_3]
root	186	2	0	16:30	?	00:00:00	[scsi_eh_4]
root	187	2	0	16:30	?	00:00:00	[scsi_tmf_4]
root	188	2	0	16:30	?	00:00:00	[scsi_eh_5]
root	189	2	0	16:30	?	00:00:00	[scsi_tmf_5]
root	192	2	0	16:30	?	00:00:00	[kworker/u8:5]
root	194	2	0	16:30	?	00:00:00	[i915/signal:0]
root	195	2	0	16:30	?	00:00:00	[i915/signal:1]
root	196	2	0	16:30	?	00:00:00	[i915/signal:2]
root	197	2	0	16:30	?	00:00:00	[i915/signal:4]
root	201	2	0	16:30	?	00:00:00	[kworker/1:1H]
root	203	2	0	16:30	?	00:00:00	[kworker/3:1H]