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: ./file11.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
```

Absolutee 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 file11.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 file11.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
             00:00:00 cat
 1923 pts/1
              00:00:00 cat
 1969 pts/1
 2314 pts/1
             00:00:00 ps
student@student-V520-15IKL:~/tpc$ ps -f
         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
                                   00:00:00 cat
        1969 1891 0 16:42 pts/1
student
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
              00:00:00 kthreadd
              00:00:00 kworker/0:0H
             00:00:00 mm percpu wq
    7 ?
              00:00:00 ksoftirgd/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 ksoftirgd/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
```

```
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
               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
               00:00:00 oom_reaper
   38 ?
   39 ?
               00:00:00 writeback
   40 ?
               00:00:00 kcompactd0
   41 ?
               00:00:00 ksmd
   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
               00:00:00 devfreq wq
   51 ?
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
           PID PPID C STIME TTY
                                            TIME CMD
root
             1
                   0
                     0 16:30 ?
                                        00:00:00 /sbin/init splash
             2
                      0 16:30 ?
                                        00:00:00 [kthreadd]
root
                   0
             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
                                        00:00:01 [rcu_sched]
             8
                   2
                      0 16:30 ?
root
            9
                   2 0 16:30 ?
root
                                        00:00:00 [rcu bh]
           10
                   2 0 16:30 ?
                                        00:00:00 [migration/0]
root
           11
                   2 0 16:30 ?
root
                                        00:00:00 [watchdog/0]
           12
                   2 0 16:30 ?
                                        00:00:00 [cpuhp/0]
root
           13
                   2 0 16:30 ?
                                        00:00:00 [cpuhp/1]
root
                   2 0 16:30 ?
            14
                                        00:00:00 [watchdog/1]
root
            15
                   2
                      0 16:30 ?
                                        00:00:00 [migration/1]
root
root
            16
                   2 0 16:30 ?
                                        00:00:00 [ksoftirqd/1]
            18
                   2 0 16:30 ?
                                        00:00:00 [kworker/1:0H]
root
            19
                   2 0 16:30 ?
root
                                        00:00:00 [cpuhp/2]
            20
                   2 0 16:30 ?
root
                                        00:00:00 [watchdog/2]
                                        00:00:00 [migration/2]
            21
                   2 0 16:30 ?
root
            22
                   2 0 16:30 ?
                                        00:00:00 [ksoftirqd/2]
root
```

25 ?

00:00:00 cpuhp/3

```
24
                    2
                      0 16:30 ?
                                         00:00:00 [kworker/2:0H]
root
            25
                                         00:00:00 [cpuhp/3]
root
                    2
                       0 16:30
                               ?
                       0 16:30 ?
                                         00:00:00 [watchdog/3]
            26
                    2
root
            27
                    2
                      0 16:30 ?
                                         00:00:00 [migration/3]
root
            28
                    2
                      0 16:30 ?
                                         00:00:00 [ksoftirqd/3]
root
                    2
root
            30
                      0 16:30 ?
                                         00:00:00 [kworker/3:0H]
            31
                    2
                      0 16:30 ?
                                         00:00:00 [kdevtmpfs]
root
            32
                    2
                      0 16:30 ?
                                         00:00:00 [netns]
root
                    2
            33
                       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
                    2
            38
                      0 16:30 ?
                                         00:00:00 [oom reaper]
root
            39
                      0 16:30 ?
                                         00:00:00 [writeback]
root
            40
                    2
                      0 16:30 ?
                                         00:00:00 [kcompactd0]
root
                      0 16:30 ?
            41
                    2
                                         00:00:00 [ksmd]
root
            42
                    2
                      0 16:30 ?
                                         00:00:00 [khugepaged]
root
root
            43
                    2
                       0 16:30
                               ?
                                         00:00:00 [crypto]
            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
                                         00:00:00 [ata sff]
            48
                    2
                     0 16:30 ?
root
            49
                    2 0 16:30 ?
root
                                         00:00:00 [md]
                                         00:00:00 [edac-poller]
            50
                    2
                      0 16:30 ?
root
                    2
                      0 16:30 ?
            51
                                         00:00:00 [devfreq wq]
root
            52
                    2
                       0 16:30 ?
                                         00:00:00 [watchdogd]
root
            55
                    2
                       0 16:30 ?
root
                                         00:00:00 [kswapd0]
                                         00:00:00 [kworker/u9:0]
            56
                    2
                       0 16:30 ?
root
            57
                    2
root
                      0 16:30 ?
                                         00:00:00 [ecryptfs-kthrea]
            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
                    2
                      0 16:30 ?
                                         00:00:00 [kstrp]
           113
root
                    2
root
           130
                      0 16:30 ?
                                         00:00:00 [charger manager]
                                         00:00:00 [scsi eh 0]
root
           178
                    2
                       0 16:30
                                3
                                         00:00:00 [scsi_tmf_0]
           179
                    2
                       0 16:30 ?
root
                    2
                      0 16:30 ?
                                         00:00:00 [scsi eh 1]
           180
root
           181
                    2 0 16:30 ?
root
                                         00:00:00 [scsi tmf 1]
           182
                    2 0 16:30 ?
                                         00:00:00 [scsi eh 2]
root
           183
                    2
                      0 16:30 ?
                                         00:00:00 [scsi tmf 2]
root
                    2
                      0 16:30 ?
                                         00:00:00 [scsi eh 3]
           184
root
                    2
                       0 16:30 ?
                                         00:00:00 [scsi tmf 3]
root
           185
                    2
           186
                       0 16:30 ?
                                         00:00:00 [scsi eh 4]
root
                    2
           187
                       0 16:30 ?
                                         00:00:00 [scsi_tmf_4]
root
                                         00:00:00 [scsi_eh_5]
           188
                    2
                       0 16:30 ?
root
                    2
root
           189
                      0 16:30 ?
                                         00:00:00 [scsi tmf 5]
           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
                    2
           196
                      0 16:30 ?
                                         00:00:00 [i915/signal:2]
root
           197
                    2
                       0 16:30 ?
                                         00:00:00 [i915/signal:4]
root
                    2
root
           201
                       0 16:30
                               ?
                                         00:00:00 [kworker/1:1H]
                                         00:00:00 [kworker/3:1H]
root
           203
                    2
                       0 16:30 ?
           303
                    2
                      0 16:30 ?
                                         00:00:00 [jbd2/sda4-8]
root
                    2
           304
                      0 16:30 ?
                                         00:00:00 [ext4-rsv-conver]
root
           319
                    2 0 16:30 ?
root
                                         00:00:00 [kworker/2:1H]
                                         00:00:00 /lib/systemd/systemd-
           351
                    1 0 16:30 ?
root
journald
```

```
376
                    1 0 16:30 ?
                                         00:00:00 /sbin/lvmetad -f
root
           377
                                         00:00:00 /lib/systemd/systemd-
root
                    1
                       0 16:30 ?
                       0 16:30 ?
           672
                                         00:00:00 /usr/sbin/cron -f
                    1
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
                    2
                     0 16:54 ?
root
          2031
                                         00:00:00 [kworker/1:0]
          2035
                    2
                      0 16:55 ?
                                         00:00:00 [kworker/2:1]
root
          2036
                    2
                      0 16:56 ?
                                         00:00:00 [kworker/0:1]
root
                    2
                      0 16:56 ?
                                         00:00:00 [kworker/u8:1]
          2037
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
                    2
          2305
                       0 17:00 ?
                                         00:00:00 [kworker/2:2]
root
          2307
                    2
                       0 17:01 ?
                                         00:00:00 [kworker/1:2]
root
                       0 17:01 ?
          2311
                    2
root
                                         00:00:00 [kworker/0:0]
          2319
                1891 0 17:03 pts/1
                                         00:00:00 ps -ef
student
student@student-V520-15IKL:~/tpc$ ps -ef
UID
           PID
                PPID
                       C STIME TTY
                                             TIME CMD
                       0 16:30 ?
                                         00:00:00 /sbin/init splash
root
             1
                    \cap
             2
                    0
                       0 16:30 ?
                                         00:00:00 [kthreadd]
root
              4
                       0 16:30 ?
                                         00:00:00 [kworker/0:0H]
root
                      0 16:30 ?
root
              6
                                         00:00:00 [mm percpu wq]
             7
                                         00:00:00 [ksoftirqd/0]
                    2
                      0 16:30 ?
root
             8
                      0 16:30 ?
                    2
                                         00:00:01 [rcu sched]
root
             9
                    2
                       0 16:30 ?
                                         00:00:00 [rcu bh]
root
            10
                    2
                       0 16:30 ?
root
                                         00:00:00 [migration/0]
                                         00:00:00 [watchdog/0]
            11
                    2
                       0 16:30 ?
root
                    2
                      0 16:30 ?
root
            12
                                         00:00:00 [cpuhp/0]
            13
                    2
                      0 16:30 ?
                                         00:00:00 [cpuhp/1]
root
            14
                    2 0 16:30 ?
                                         00:00:00 [watchdog/1]
root
                                         00:00:00 [migration/1]
            15
                    2 0 16:30 ?
root
                                         00:00:00 [ksoftirqd/1]
                    2
                      0 16:30 ?
            16
root
                    2
                      0 16:30 ?
root
            18
                                         00:00:00 [kworker/1:0H]
root
            19
                    2
                      0 16:30 ?
                                         00:00:00 [cpuhp/2]
            20
                    2
                      0 16:30 ?
                                         00:00:00 [watchdog/2]
root
                    2 0 16:30 ?
                                         00:00:00 [migration/2]
            2.1
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
                    2
            28
                       0 16:30 ?
                                         00:00:00 [ksoftirqd/3]
root
                    2
            30
                       0 16:30 ?
                                         00:00:00 [kworker/3:0H]
root
                                         00:00:00 [kdevtmpfs]
            31
                    2
                       0 16:30 ?
root
            32
                    2
root
                      0 16:30 ?
                                         00:00:00 [netns]
            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
root
                       0 16:30 ?
                                         00:00:00 [writeback]
root
            40
                    2
                       0 16:30 ?
                                         00:00:00 [kcompactd0]
            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 ?
root
                                         00:00:00 [crypto]
                                         00:00:00 [kintegrityd]
            44
                    2 0 16:30 ?
root
                    2 0 16:30 ?
            45
                                         00:00:00 [kblockd]
root
```

```
2 0 16:30 ?
                                       00:00:00 [kworker/3:1]
            47
root
            48
                   2 0 16:30 ?
                                       00:00:00 [ata sff]
root
                                       00:00:00 [md]
            49
                   2 0 16:30 ?
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
                                       00:00:00 [kswapd0]
           55
                   2 0 16:30 ?
root
                                       00:00:00 [kworker/u9:0]
           56
                   2 0 16:30 ?
root
                   2 0 16:30 ?
                                       00:00:00 [ecryptfs-kthrea]
           57
root
                   2
           99
                     0 16:30 ?
                                       00:00:00 [kthrotld]
root
           100
                   2
                     0 16:30 ?
                                       00:00:00 [acpi_thermal_pm]
root
                   2 0 16:30 ?
           104
                                       00:00:00 [ipv6 addrconf]
root
           113
                   2 0 16:30 ?
root
                                       00:00:00 [kstrp]
           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
                   2 0 16:30 ?
                                       00:00:00 [scsi eh 1]
root
           180
root
           181
                   2
                     0 16:30 ?
                                       00:00:00 [scsi tmf 1]
                                       00:00:00 [scsi_eh_2]
root
           182
                   2
                     0 16:30 ?
           183
                   2 0 16:30 ?
                                       00:00:00 [scsi_tmf_2]
root
                                       00:00:00 [scsi_eh_3]
           184
                   2 0 16:30 ?
root
           185
                   2 0 16:30 ?
                                       00:00:00 [scsi tmf 3]
root
                   2 0 16:30 ?
root
           186
                                       00:00:00 [scsi eh 4]
           187
                   2 0 16:30 ?
                                       00:00:00 [scsi tmf 4]
root
                   2 0 16:30 ?
                                       00:00:00 [scsi eh 5]
           188
root
                                       00:00:00 [scsi_tmf_5]
root
           189
                   2 0 16:30 ?
           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 ?
root
                                       00:00:00 [i915/signal:1]
           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
                   2 0 16:30 ?
           203
                                       00:00:00 [kworker/3:1H]
root
```