

root@IT4100-10G: /mounts

root@IT4100-10G: /mounts

joe@yavin: ~/s17/it4600

```
root@IT4100-10G:/mounts# echo "Corrupt the superblock"
```

```
Corrupt the superblock
```

```
root@IT4100-10G:/mounts#
```

```
root@IT4100-10G: /mounts/d2
root@IT4100-10G: /mounts/d2# cd d2/
root@IT4100-10G: /mounts/d2# mount | grep d2
/dev/sda7 on /mounts/d2 type ext4 (rw,relatime,data=ordered)
root@IT4100-10G: /mounts/d2# echo "See it is mounted"
See it is mounted
root@IT4100-10G: /mounts/d2#
```

root@IT4100-10G: /mounts/d2

root@IT4100-10G: /mounts/d2

joe@yavin: ~/s17/it4600

```
root@IT4100-10G:/mounts/d2# for i in {1..10}; do touch file_$(i).txt; done
```

```
root@IT4100-10G:/mounts/d2# ls
```

```
file_10.txt  file1.txt  file_3.txt  file_5.txt  file_7.txt  file_9.txt
```

```
file_1.txt  file_2.txt  file_4.txt  file_6.txt  file_8.txt
```

```
root@IT4100-10G:/mounts/d2#
```

root@IT4100-10G: /mounts/d2

root@IT4100-10G: /mounts/d2

joe@yavin: ~/s17/it4600

```
root@IT4100-10G:/mounts/d2# echo "Now for some corruption"
```

```
Now for some corruption
```

```
root@IT4100-10G:/mounts/d2# dd if=/dev/zero of=/dev/sda7 count=1 bs=2048 seek=1
```

```
1+0 records in
```

```
1+0 records out
```

```
2048 bytes (2.0 kB, 2.0 KiB) copied, 0.00199574 s, 1.0 MB/s
```

```
root@IT4100-10G:/mounts/d2#
```

root@IT4100-10G: /mounts

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joe@yavin: ~/s17/it4600

```
root@IT4100-10G:/mounts/d2# cd ..
```

```
root@IT4100-10G:/mounts# umount d2
```

```
root@IT4100-10G:/mounts# mount d2
```

```
mount: mount /dev/sda7 on /mounts/d2 failed: Structure needs cleaning
```

```
root@IT4100-10G:/mounts# echo "Uh oh!!!!"
```

```
echo "Uh ohmount d2mount d2"
```

```
Uh ohmount d2mount d2
```

```
root@IT4100-10G:/mounts#
```

```
root@IT4100-10G:/mounts# fsck.ext4 -vy /dev/sda7
e2fsck 1.42.13 (17-May-2015)
ext2fs_check_desc: Corrupt group descriptor: bad block for block bitmap
fsck.ext4: Group descriptors look bad... trying backup blocks...
/dev/sda7 was not cleanly unmounted, check forced.
Pass 1: Checking inodes, blocks, and sizes
Pass 2: Checking directory structure
Pass 3: Checking directory connectivity
/lost+found not found. Create? yes

Pass 4: Checking reference counts
Pass 5: Checking group summary information
Free blocks count wrong for group #0 (14714, counted=14722).
Fix? yes

Free blocks count wrong for group #1 (16333, counted=16332).
Fix? yes

Free blocks count wrong (45332, counted=45339).
Fix? yes

Free inodes count wrong for group #0 (6388, counted=6378).
Fix? yes

Directories count wrong for group #0 (3, counted=2).
Fix? yes
```

```
root@IT4100-10G: /mounts
root@IT4100-10G: /mounts x
joe@yavin: ~/s17/it4600 x
Fix? yes
Free inodes count wrong (25588, counted=25578).
Fix? yes

/dev/sda7: ***** FILE SYSTEM WAS MODIFIED *****

    22 inodes used (0.09%, out of 25600)
    0 non-contiguous files (0.0%)
    0 non-contiguous directories (0.0%)
    # of inodes with ind/dind/tind blocks: 0/0/0
    Extent depth histogram: 13
 5861 blocks used (11.45%, out of 51200)
    0 bad blocks
    0 large files

 11 regular files
    1 directory
    0 character device files
    0 block device files
    0 fifos
    0 links
    0 symbolic links (0 fast symbolic links)
    0 sockets

-----
    12 files
root@IT4100-10G: /mounts#
```

```
root@IT4100-10G:/mounts# mount d2
root@IT4100-10G:/mounts# ls d2/
file_10.txt  file1.txt  file_3.txt  file_5.txt  file_7.txt  file_9.txt
file_1.txt  file_2.txt  file_4.txt  file_6.txt  file_8.txt  lost+found
root@IT4100-10G:/mounts#
```