Lab

## Total inodes used: 1577968

## Percentage of inode used: 30%

## Blocksize for system: 4096

## Inode number for file.txt : 1240987 file.txt

File type : regular

Mode: 0644

Flags: 0x80000

Links: 1

Inode checksum: 0x3093915e

EXTENTS: (0):5411844

Results of ls-li:

File.txt:

Inode number: 1240987

File mode : -rw-r--r—

File name : file.txt

File size : 12

Bye.txt:

Inode number: 1241033

File mode : - -rw-r--r--

File name : file.txt

File size : 46

Results of ls –li:

total 12

1241039 -rw-r--r-- 2 root root 12 Jul 10 16:37 bye.txt

1241039 -rw-r--r-- 2 root root 12 Jul 10 16:37 file1.txt

1240987 -rw-r--r-- 1 root root 12 Jul 10 15:48 file.txt

1241037 lrwxrwxrwx 1 root root 8 Jul 10 16:14 hi.txt -> file.txt

# Difference between Soft and Hard link

A hard link is a direct reference (pointer) to the data of a file on the disk. Multiple filenames can refer to the same inode (and therefore the same data). A soft link, or symbolic link, is a file that contains a reference to another file or directory in the form of a pathname. Hard links have the same inode number in the above example, the file bye.txt is a hard link to file1.txt as both of them have the same inode number (1241039), as u can see hi.txt is pointing to file.txt this is an example of soft link.

In case of hard link the inode value difference is 0, as both the files file1.txt and bye.txt have same inode number 1241039

In case of soft link it has different inode number. In the above example hi.txt is a soft link with inode number 1241087 and file.txt has inode number 1241037 so there is a difference of 50 between 2 inode values