

Lab 4
ES22BTECH11034
SWAPNIL BAG

- A user program named my_file.c is declared. To run it my_file <filename> <file size> (name and size provided as command line arguments)
- The program creates a file and writes the roll no. to appropriate no. of blocks based on the size provided by the user
- A system call was implemented in sysproc.c (getDiskBlock that in turn calls block info) that fetches the file structure from the given file descriptor and then fetches the inode structure from that given file structure. Then loop through all the blocks, and keep printing the block no. and read the contents of the next block in a buffer

Output

```
xv6 kernel is booting

hart 1 starting
hart 2 starting
init: starting sh
$ my_file hell.txt 4096
Inode number: 21
block 0 : 778
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block 1 : 779
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block 2 : 780
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block 3 : 781
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```

Here a file hell.txt is created with size 4096 that's 4*BSIZE (block size) , hence the roll no. is written over 4 blocks and the contents of each block is printed. Inode 21 means that the contents of the file is stored in a multilevel inode.