

Inode - Inodes in UNIX are data structures which contain all the properties of the file include file size, file owner, the group to which the file belongs to, file access rights, hard link count, the location where the file contents are present and time stamps (last modified time, last accessed time, last changed time).

- In other words, the inode data structure contains all the information of the file except the file name and its contents.

• Disk Inodes consist of a following fields:-

- (i) File Owner identifier.
- (ii) File type.
- (iii) File access permission.
- (iv) File access time.

1) File Owner identifier - Ownership of

a file is divided between individual owner and group of owner. It defines the set of users who have authority to access a file.

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28		

2) File type - Files may be of type regular, directory, character, block or special.

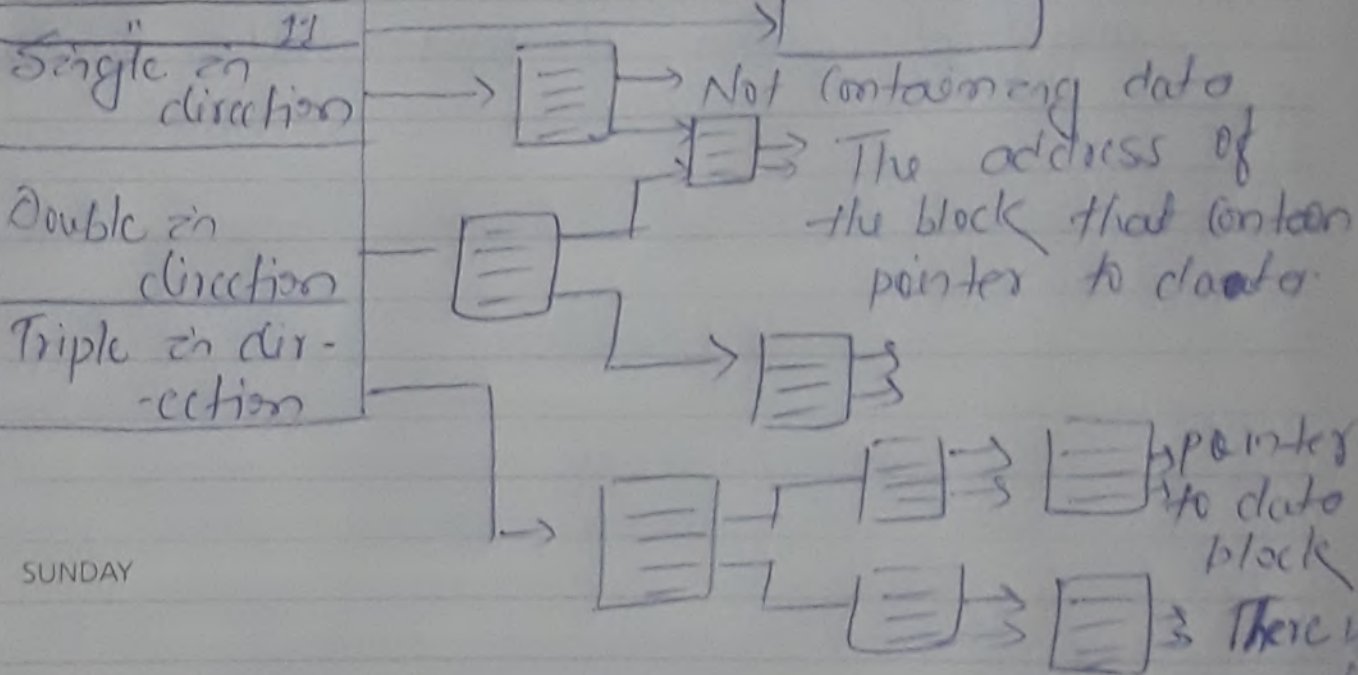
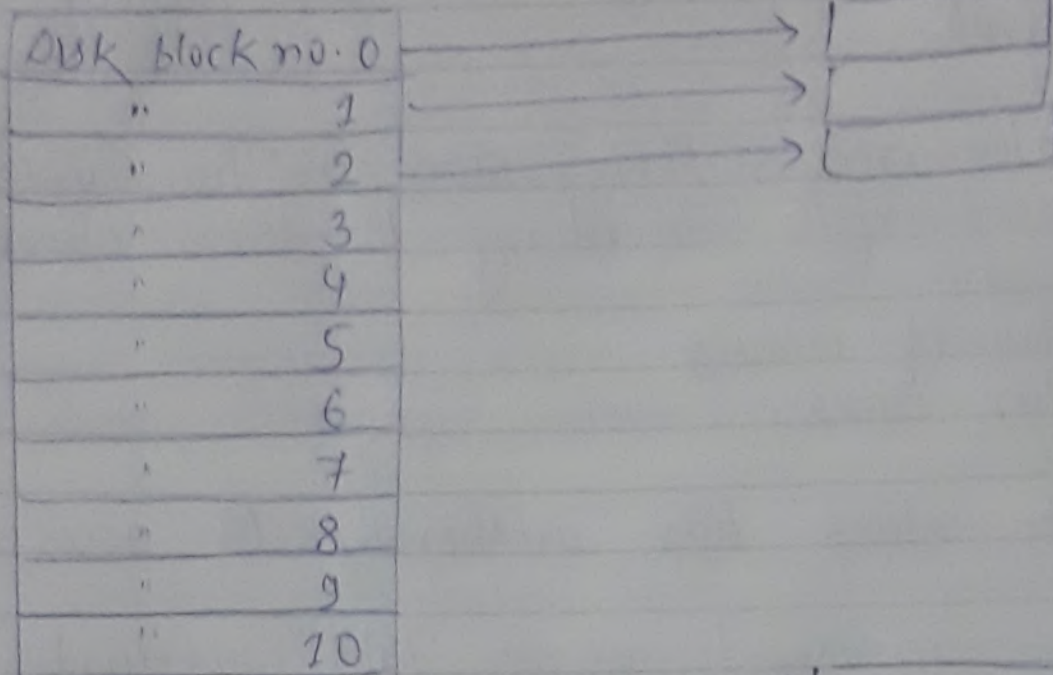
3) File access Permission - The System protects file according to three classes:-
→ Owner.
→ Group of owners.
→ Other users.

Each class has authority to access file.

4) File access times - File was last modified when it was last accessed.

I-node

Data block



(013-352) WK 02

13 SUNDAY

There is 15 pointers of disk blocks containing the data contents of the file.