

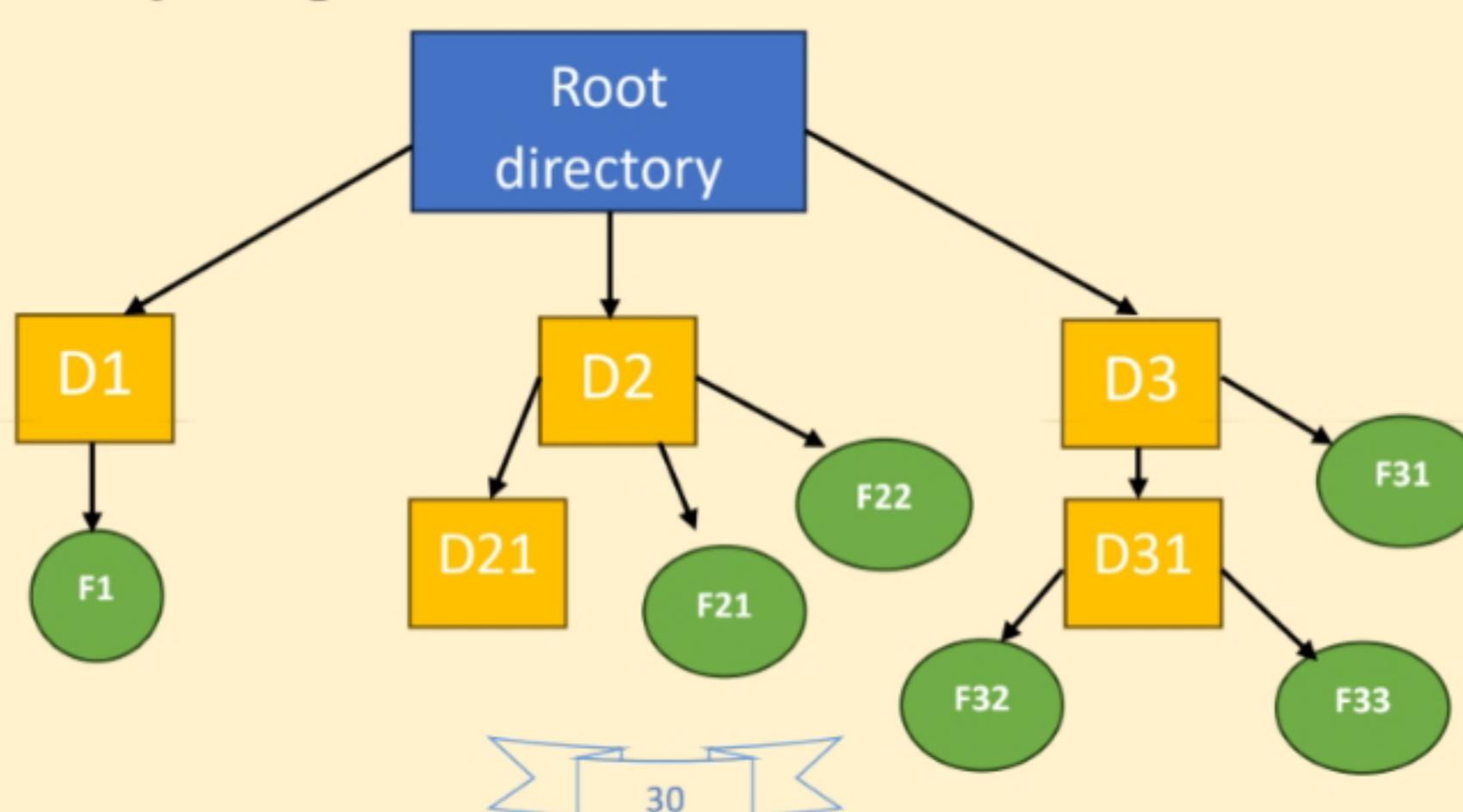
usually stored on disk. All file I/O operations are in terms of blocks. Physical records and all blocks are equal size. Its size is determined by the size of sector.

The carbon responsibilities of the file management system include the following

- Mapping of logical file address to physical disk addresses
- Management of disk space and allocation and deallocation
- Keeping track of all files in the system
- Support for protection and sharing of file recovery.

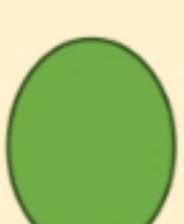
### directories

In many systems directories are treated as files, which keep track of all other files. A single flat directory can contain a list of all files in a system. Flat directories are those directories in which the root directory contains all system files and there are no other directories. When hierarchical directories (i.e. a tree of directories) are used, the collection of all directory and subdirectory entirely defines the system files. This is a more natural way to organize files.



### Hierarchical directory

 - Indicates directory

 - Indicates file

The Linux file system resembles an upside-down tree. Thus, the file system begins with a directory called root. The root directory is denoted as slash (/). From the root there are several subdirectories called bin, lib, usr, etc. tmp and dev. The root directory also contains a file called Linux, which is the Linux kernel itself. These subdirectories are called subdirectories, their parent being the root directory. Each of