What does it mean that a file under UNIX lacks structure?

By "file," we imply a collection of bytes with no discernible organisational structure. Files are organised into blocks or records by other filesystems. In UNIX, the application programme must impose any such structure on the data. This makes data processing easier and enables application programmes to treat data from or to any source uniformly.

Describe the ext2 filesystem. What data does a superblock in an ext2 filesystem contain?

Second Extended File System (Ext2)

The Linux kernel's file system is called ext2, or second extended file system. Rémy Card, a French software developer, initially created it to take the place of the extended file system.

It was done to get around the old Ext file system's limitations. The range for file size is 16GB to 2TB. There is no journaling feature available. It is used for commonly used Flash-based storage media, such as USB Flash drives and SD Cards.

Filesystem size, number of free blocks, list of free blocks, index of the next free block, number of free inodes, index of the next free inode, and filesystem clean flag are all contained in the superblock.

List three Linux text editors. Give a brief description of the vi editor's three "modes".

emacs, joe, pico, nano, and vi

Command mode:

When you start an edit session in vi, command mode is activated. If you do not see the word "insert" or a colon at the bottom of your editing window when using Linux, you are in command mode.

Text-Input (Insert mode) mode -

Text-Input (Insert mode) mode - When you see the word "insert" at the bottom of your editing window, you'll know you're in text-input mode. You can get back into command mode by pressing ESC.

Last Line Mode/Colon Mode:

When you type a ":" while in command mode, the cursor will go to the last line on the screen, where you can type global commands like wq or q!. To do some intricate operations on your file that cannot be completed with simple keystrokes, you must be in Last Line mode.