1, What impact does a file system have on an operating system's overall performance?

Step1:

The operating system uses the file system or file system (commonly abbreviated to fs) as a mechanism and data structure to regulate how data is saved and accessed.

What is referred to as a File System is a crucial component of an OS. A file system is a type of data structure that organises data and makes it accessible on storage media like hard drives and floppy discs. Although different OSs employ various file systems, they all share many of the same functions.

Step 2:

A file system is a tool that enables users to organise information by storing it in files and arranging those files in a useful way that makes it possible to refer to specific files by name. In order to make finding files easier, it often allows files to be organised into directories. It also serves to hide the distinctions between the several types of hardware that can be utilised to store files.

2. While advanced file managers implement file sharing by enabling multiple users to access a single copy of a file simultaneously, other file managers implement file sharing by giving each user their own copy of the file. List each approach's benefits and drawbacks.

Step 1:

The file manager shows the hierarchy of the files and folders and offers tools for creating, moving, renaming, and deleting folders as well as files. Applications produce files; a file manager only creates folders.

Users can create and save new files on a computer (laptop or desktop), examine all the files stored on the computer, and organise them in various hierarchical configurations, such as folders, for simple categorization.

They may also be known as file managers. The system comes with Windows Explorer as the default file management programme. Other instances of file management software include Directory Opus, Double Commander, and Google Desktop.

Step 2:

One benefit of having just one copy of a file that multiple users can access is the reduction of space requirements for additional storage and memory. The drawback is that in order to permit several users to access that file without compromising its integrity, the operating system must include a concurrency control technique, similar to that of readers and writers.

The main drawback of having several copies of the same file is the amount of room it takes up in main memory and secondary storage. The operating system does not have to implement mutual exclusion when many users access the same file, which is a benefit.