CHAPTER 9: FILE ORGANISATION

Introduction to File organization

Files contain computer records which can be documents or information which is stored in a certain way for later retrieval.

File organization refers primarily to the logical arrangement of data (which can itself be organized in a system of records with correlation between the fields/columns) in a file system. It should not be confused with the physical storage of the file in some types of storage media. There are certain basic types of computer file, which can include files stored as blocks of data and streams of data, where the information streams out of the file while it is being read until the end of the file is encountered.

file organization is a design decision, hence it must be done having in mind the achievement of good performance with respect to the most likely usage of the file. The criteria usually considered important are:

1. Fast access to single record or collection of related recors.
2. Easy record adding/update/removal, without disrupting .
3. Storage efficiency.
4. Redundance as a warranty against data corruption.

Description of File Stream

Stream is not a hardware it is linear queue which connect file to program and passes block of data in both direction .So it is independent of devices which we are using. We can also define stream as source of data. This source can be

(a) A file

(b) Hard disk or CD, DVD etc.

(c) I/O devices etc.

In c++ programming language there are two type of stream.

(a) Text streams

(b) Binary streams

Files and Streams properties