**FILE**

**What:**

A file is a container in a computer system for storing information. Files used in computers are similar in features to that of paper documents used in library and office files. There are different types of files such as text files, data files, directory files, binary and graphic files, and these different types of files store different types of information. In a computer operating system, files can be stored on optical drives, hard drives or other types of storage devices.

**When:**

The basic operations that can be performed on a file are:

* Creation of a new file
* Modification of data or file attributes
* Reading of data from the file
* Opening the file in order to make the contents available to other programs
* Writing data to the file
* Closing or terminating a file operation

**How:**

The standard file handling classes,

1. Ofstream

It signifies the output file stream and is applied to create files for writing information to files

2. Ifstream

It signifies the input file stream and is applied to create files for reading information to files

3. Fstream

It has the capability of representing both istream and ostream.

Opening a file:

Syntax:

***open(filename, mode);***

Mode:

ios::app: append mode

* ios::ate: open a file in this mode for output and read/write controlling to the end of the file
* ios::in: open file in this mode for reading
* ios::out: open file in this mode for writing
* ios::trunk: when any file already exists, its contents will be truncated before file opening

Closing a file:

When any C++ program terminates, it automatically flushes out all the streams releases all the allocated memory and closes all the opened files.

Syntax:

***fileObject.close( );***