**File Handling in C Language**

A **file** represents a sequence of bytes on the disk where a group of related data is stored. File is created for permanent storage of data. It is a ready made structure.

In C language, we use a structure **pointer of file type** to declare a file.

FILE **\*fp**;

C provides a number of functions that helps to perform basic file operations. Following are the functions,

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| **Function** | **description** |
| fopen() | create a new file or open a existing file |
| fclose() | closes a file |
| getc() | reads a character from a file |
| putc() | writes a character to a file |
| fscanf() | reads a set of data from a file |
| fprintf() | writes a set of data to a file |
| getw() | reads a integer from a file |
| putw() | writes a integer to a file |
| fseek() | set the position to desire point |
| ftell() | gives current position in the file |
| rewind() | set the position to the begining point |

**Opening a File or Creating a File**

The fopen() function is used to create a new file or to open an existing file.

**General Syntax :**

\*fp = FILE **\*fopen**(const char *\*filename*, const char *\*mode*);

Here **filename** is the name of the file to be opened and **mode** specifies the purpose of opening the file. Mode can be of following types,

**\*fp** is the FILE pointer (FILE \*fp), which will hold the reference to the opened(or created) file.

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| **mode** | **description** |
| r | opens a text file in reading mode |
| w | opens or create a text file in writing mode. |
| a | opens a text file in append mode |
| r+ | opens a text file in both reading and writing mode |
| w+ | opens a text file in both reading and writing mode |
| a+ | opens a text file in both reading and writing mode |
| rb | opens a binary file in reading mode |
| wb | opens or create a binary file in writing mode |
| ab | opens a binary file in append mode |
| rb+ | opens a binary file in both reading and writing mode |
| wb+ | opens a binary file in both reading and writing mode |
| ab+ | opens a binary file in both reading and writing mode |

**Closing a File**

The fclose() function is used to close an already opened file.