



File Modes

“r” open text file for reading

“w” open text file for writing,discard previous contents if any

“a” append ; open or create text file for writing at the end

“r+” open text file for update (reading & writing)

“w+” create a text file for update ; discard previous contents if any

“a+” append open or create text file for update writing at the end

If mode includes b after initial letter as “rb” indicates a binary file.



ftell takes a file pointer and returns a number of type long, that corresponds to the current position. This function is useful in saving current position of a file which can be used later in the program.

Eg: `n=ftell(fp);` n bytes already been read (or written).

rewind takes file pointer and resets the position to the start of the file. `rewind(fp); n=ftell(fp);` Would assign `n=0` as 1st byte in file is assigned 0, 2^{ed} 1 and so on.

This function helps us to read the file more than once without having to close or open file. Whenever file is open for reading or writing a rewind is done implicitly.



Random Access to Files

fseek function is used to read the particular part of the file

fseek- is used to move the file position to desired position with in a file `fseek(file ptr, offset, position)`

ptr is a pointer to the file concerned , **offset** is number or variable of type long , **position** is as integer number

Offset specifies the number of positions (bytes) to be moved from location specified by position. **Position** can take three values

Value	meaning	Macro
0	beginning of file	SEEK_SET
1	Current position	SEEK_CUR
2	End of file	SEEK_END

Offset may be positive meaning move forward or negative meaning Moving backwards



fseek(fp,0L,0) go to the beginning (like rewind)

fseek(fp,0L,1) stay at the current position

fseek(fp,0L,2) go to the end of file.

fseek(fp,m,0) moves to (m+1) th byte in the file.

fseek(fp,m,1) go forward by m bytes.

fseek(fp,-m,1) go backward by m bytes form current position

fseek(fp,-m,2) go backward by m bytes form end



```
int main()
{
    char ch;
    FILE *fp=NULL;
    fp=fopen("c:\\abc.txt","r");
    if(fp==NULL)
        printf("\n File is not present");
    else
    {
        fseek(fp,-1l,2); /* Postion to the last chararter */
        do
        {
            ch=getc(fp);
            printf("%c", ch);
        }while(!fseek(fp,-2L,1));
    };
}
```

