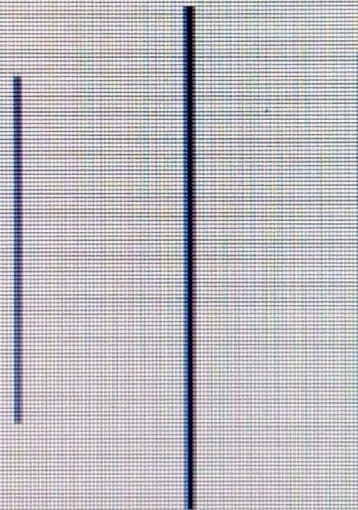


**INSTITUTE OF ENGINEERING  
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KUPONDOLE, LATIPUR  
(AFFILIATED TO TRIBHUVAN UNIVERSITY)**



LAB REPORT

LAB NO.: 10

SUBJECT: C PROGRAMMING

SUBMITTED BY:

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DATE: 2078/

SUBMITTED TO:

DEPARTMENT OF  
COMPUTER &  
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# TITLE : FILE HANDLING TECHNIQUES IN C-PROGRAMMING.

## Objective.

To understand data files & file handling in C.

## THEORY

File handling in C is a process where some bytes of data can be written & stored permanently in the disk so that in a later pt. of time, the retrievable data can be fetched & retrieved. File handling in C makes use of structure pointer of the file type to declare a file.

### \* File Handling operations in C:

The C-programming offers various operations associated with file handling. They are:

- (i) Creating a new file: `fopen()`
- (ii) Opening an existing file in your system: `fopen()`.
- (iii) Closing a file: `fclose()`
- (iv) Reading characters from a line: `getc()`
- (v) Writing character in a file: `putc()`
- (vi) Reading a set of data from a file: `fscanf()`
- (vii) Writing a set of data in a file: `fscanf()`
- (viii) Reading an integral value from a file: `getw()`.
- (ix) Writing an integral value in a file: `putw()`
- x) Setting a desired position in the file: `fseek()`.

### (\*) Opening a text File in C:

We use the `fopen()` Function to create or open a file as mentioned earlier. It's pretty obvious that creating or opening a file is the first step in file handling once the file has been created, it can be opened, modified or deleted.

Syntax:

```
*Fpointer = FILE * Fopen (const char * file-name, const  
char * mode);
```

### (\*) Closing a text file in C:

We use the `fclose()` function to close a file that is already open. It's pretty obvious that the file needs to be opened so that the operation to close a file can be performed.

### (\*) Reading a file:

`fgets` function is used to read a file line by line.

In a C-program we use `fgets` Function as below:

```
fgets (buffer, size, fp);
```

### (\*) Mode of operations performed on a file in C:

There are many modes in operating a file. Based on the mode of file, it can be opened for reading or writing or appending the texts. They're listed below:

- `r`-opens a file in read mode & sets pointer to the first character in the file. It returns null if file doesn't exist.

- `w`-opens a file in write mode. It returns null if file couldn't be opened. If file exists, data are over written.

- `a` - opens a file in append mode. It returns null if null if file couldn't be opened.

- `r+` - opens a file for read & write mode & sets pointer to 1<sup>st</sup> character in file.

- `w+` - opens a file for read & write mode & sets pointer to the 1<sup>st</sup> character in file.

- `a+` - opens a file for read & write mode & sets pointer to the first characters in file But, it can't modify existing contents.