01.

What is

File Handling?

File Handling

File handling involves **operations on files**, such as **reading from** or **writing to files**.

The **stdio.h** library provides functions for file handling.

Operations on Files

1. Open a file
fopen() function

2. Read a file
fgets() or **fscanf()** function

3. Write/append into a file
fputs() or **fprintf()** functions

4. Close a file
fclose() function

File Opening Modes

"r"

File Reading

"a"

File Writing (Appending)

"w"

File Writing

"x"

File Creation

Let's see each **operations** in detail...

01

Open a file

Open a File

To open a file, you can use the **fopen()** function.
Refer the below mentioned syntax:

```
fopen("fileName", "mode");
```

filename is the **name of the file**, and **mode** specifies the **type of access**
(e.g., "r" for reading, "w" for writing, "a" for appending).

Open a File

The **fopen()** function returns an address of a type **FILE**.
So to receive this, we have to create a *FILE pointer.

```
FILE *ptr = fopen("fileName", "mode");
```

02

Read a file

Read a File

To read a file, you can use the **fgets()** function. Refer the below mentioned syntax:

```
fgets(container, size of buffer, filePointer);
```

size of buffer is the **size of characters** that reads/fetches from a file at a time.

Read a File

If all characters are already fetched,
then **fgets()** function returns **NULL**.

```
fgets(container, size of buffer, filePointer);
```

03

Write into a file

Write into a File

To write into a file, you can use the **fputs()** function. Refer the below mentioned syntax:

```
fputs("data", filePointer);
```

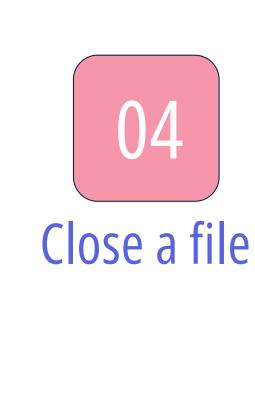**Note:** In write mode, every time the data written into a file, old content are getting wiped out.

Append into a File

To append into a file, you can use the **fputs()** function. Refer the below mentioned syntax:

```
fputs("data", filePointer);
```

Note: In append mode, every time the data written into a file, old content are getting stored as it is.

04

Close a file

Close a File

To close a connection from a file, you can use the **fclose()** function.
Refer the below mentioned syntax:

```
fclose(filePointer);
```

Language

Let's start now...