30-Day C Language Learning Plan

y 22: File Handling - Basics

1. Write to file
2. Read from file

Notes:

FILE HANDLING:- allows programs to store data permanently.

↳ to save user input / output permanently
↳ to read / write large data sets
↳ to exchange data b/w programs.

STEPS IN FILE HANDLING

1. include header → #include<stdio.h>
   ↳ enables file operations

2. Declare File pointer — FILE *fp; — points to the file.

3. open file — fopen() — opens file for specific operations

4. perform action — fprintf(), fscanf() — read / write operations.

5. close file — fclose() — closes & saves the file properly

File modes: 1. "r" → read only
2. "w" → write only
3. "a" → append, adds data to end
4. "r+" → read + write
5. "w+" → write + read
6. "a+" → read + append

(2) Reading from a file in C :

(i) To access data stored on disk.

(2) File I/O lets your program handle larger, persistent data.

(ii) Key functions for file reading

fopen() → opens a file

fgets() → reads a line of text (string)

fscanf() → reads formatted data.

fread() → reads binary data.

fclose() → close the file.

(iii) To read a file:-

i) declare a file pointer (FILE *fp);

ii) open the file:

fp = fopen("Filename.txt", "r");

iii) check if the file opened.

if (fp == NULL) { perror("Error"); return 1; }.

iv) read contents using a loop (while)

v) close the file.