

1. Define structure. Explain with example the general syntax of a structure.
2. Differentiate between union and structure.
3. Write a C program to create structure with employee details and display the same.
4. Define union. Explain the general syntax of union with example.
5. Write a C program to create structure with five student's details and display the same.
6. What are structure variables? Explain how to declare and initialise structure variable.
7. Write a program to illustrate array of structures
8. Define file?
9. Define the syntax to declare a file in C?
10. List out the different basic file operations in C?
11. Define how to Open a file and give its syntax in C?
12. Define how to Close a file and give its syntax in C?
13. List out the different modes of operation when the file is opened?
14. Define fseek() function in C and write its syntax?
15. Define ftell() function in C and write its syntax?
16. Define rewind() function in C and write its syntax?
17. Define the usage of fprintf() in C?
18. Define the usage of fscanf() in C?
19. Discuss about File handling functions?
20. Define Sequential accessing methods in file explain with example?
21. Define Random accessing methods in file explain with example?
22. a) Define File? How to open a file (explain with syntax)? b) Write a C program to write into and read from file?
23. Define Input and Output operations of a file, Explain with an example,
24. Write a C program to display the contents of a file?
25. Compare Union and Structure in C.
26. Explain various file opening modes in C. Differentiate between text file and binary file.
27. Create structure student to store the name, roll no and percentage of a student. Enter some sample values within the structure and print the details of the student with maximum marks.
28. Explain any three functions used for input/output in file handling.
29. What is the difference between structure and union?
30. Explain file handling with the help of an example.
31. Explain nested structure with example.
32. Write a C program using command line arguments which will behave the same as DOS "copy" command. Also explain how command line arguments are used.
33. What is the difference between a text file and a binary file?
34. Write a program which will take the details of 50 employees as input and display the same.  
The details include  

char [10]	eid
char [30]	ename
char [20]	department
35. Describe command line arguments with suitable examples.
36. What is the difference between union and structure?
37. Describe array in structure and array of structure. Is there any differences between structure and array?
38. Write short notes on:
  - a. fread()

- b. fwrite()
  - c. fprintf()
  - d. fscanf()
  - e. fopen()
  - f. fclose()
  - g. putc()
  - h. getc()
39. Write a program in C to copy the content of a file to another file.
  40. Explain structure in C. Write a program to read employee name, employee code, basic salary. Calculate the employees net salary by deducting income tax and HR allowance and adding DA allowance. Display the information about 3 employees.  
The net salary is calculated using formula:  

$$\text{Net salary} = \text{Basic salary} + \text{DA} - \text{income tax} - \text{HR}$$

$$\text{DA} = 20\% \text{ of basic salary}$$

$$\text{HR} = 40\% \text{ of basic salary}$$

$$\text{income tax} = 10\% \text{ of basic salary}$$
  41. Explain different types of file operations. Write a C program to copy the content of one file into another file such that all spaces are removed and target file contains only alphabets and no digits, special characters and no white spaces.  
For example: Source file  
Hi! My name is Mr. XYZ12  
Target file  
HiMynameisMrXYZ
  42. Write down the differences in structure and union.
  43. Write a program in C to copy from one file to another file.
  44. Explain structure within structure with the help of an example.
  45. Explain any three functions used for input/output in file handling.
  46. Create a structure book with the elements: name, price, pages. Write a C program to store and display data of 100 books.
  47. Describe in brief the use of Union.
  48. Explain the difference between structure and union?
  49. Can a structure be within a structure? Give appropriate examples to support your answer.
  50. What are user defined data types? What is their use in programming?
  51. What are the differences between structure and union.
  52. What is structure? Illustrate structure within structure with the help of an example.
  53. Explain various types of operating modes in C language (file)
  54. Explain file handling in C with the help of example
  55. What are derived data types? Explain structure, structure declaration, definition, and initialization.
  56. Explain file handling in C with the help of an example program.
  57. Explain command line arguments with suitable example.
  58. Difference between structure and union.
  59. Write a program to define a structure employee having fields empid, empname, salary. Store the record for n employees and only display records of those employees who have salary more than 10000.
  60. Write a program to copy the content of one file into another file.
  61. Explain fseek(), ftell() with example.

62. Explain structure within structure with the help of example.

63. Write short notes on:

- a. `fopen()` and `fclose()`
- b. `fread()` and `fwrite()`

64. Write a program that concatenate two files in a third file.

65. What do you mean by Files?

66. Explain following file manipulating functions:

- a. `fseek()`
- b. `ftell()`
- c. `fputc()`
- d. `fgetc()`
- e. `fgets()`
- f. `fputs()`