

Question Bank

Programming for Problem Solving

BTSPS101-18

1. with a neat diagram, explain the basic structure of a computer.
2. Discuss various datatypes supported by C. Mention size in bytes.
3. Classify operators in C language based on number of operands. Give suitable examples.
4. Compare and contrast flowchart and algorithms.
5. What are advantages of writing an algorithm?
6. What are keywords? Explain 3 keywords in C.
7. Write algorithm to find whether number is even or odd. Draw the flowchart for the same.
8. What would be the values of following expression. Assume $a=5$
 - a. $a+=(a++)+(++a)$
 - b. $a=(-a)-(a--)$
9. Explain increment and decrement operators.
10. What is typecasting? Explain with suitable example.
11. List different forms of 'printf'.
12. What is the difference between variable declaration and variable definition? (in a line)
13. Does a break is required by default case in switch statement?
14. What are all decision control statements in C?
15. How will you print numbers from 1 to 100 without using a loop?
16. Explain the syntax for for loop.
17. Differentiate between for loop and a while loop? What are its uses?
18. What is a nested loop?
19. What are all loop control statements in C?
20. How do you access the values within an array?
21. What is the right way to Initialize array?
22. What are multidimensional arrays?
23. What is the difference between Strings and Arrays?
24. How do you declare a variable that will hold string values?
25. What is the difference between strcpy() and strncpy() functions in C?
26. What is the difference between actual and formal parameters?
27. What are static functions? What is their use?
28. What are the different ways of passing parameters to the functions? Which to use when?
29. What is the difference between Call by Value and Call by Reference?
30. What is recursion?
31. When should we use pointers in a C program?
32. Can we access the array using a pointer in C language?
33. What is a structure?
34. What are the differences between structures and arrays?
35. What is a self-referential structure?
36. What is an Algorithm?
37. Explain Searching algorithm?
38. Define Buuble sort algorithm?
39. Define Selection sort algorithm?
40. Write a program to find quadratics roots of equations.
41. What is maerge sort?
42. Expalin Quick Sort algorithm.
43. Difference between 1-D Array and 2-D array.

44. Explain the purpose of the function `sprintf()`.
45. What is the difference between text files and binary files?
46. Describe the file opening mode "w+".
47. Is `FILE` a built-in data type?
48. What is a sequential access file?
49. What are the functions to open and close the file in C language?
50. What does the characters "r" and "w" mean when writing programs that will make use of files?