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| C Theory Questions |

1) What are the compilation stages and it's commands.

2) What are the types of errors are occured in C?

3) What is code-optimization? What are advantages of code-optimization?

4) Write a program to set a bit, clear a bit , and complement a bits.

5) Write a one line code to compare the two integer numbers using bitwise operator.

6) Write a program that converts Lower to Upper and Upper to Lower characters using bitwise.

7) What is typecasting? What are the types of typecasting? Explain with example.

8) What is the format specifier to use for printing address? Ans : “%p”

9) What are the ristrictions of switch cases? (What you should not use for switch cases).

11) Write a program to satisfy the if and else conditions. Ans : Use goto

12) Write a program to swap two integers using bitwise operators.

13) What are minimum no.of iterations for while loop? Ans : 0

14) What is volatile keyword?

19) What are the differences between Arrays & Pointers?

20) What is the sizeof char \*.

21) What is the values for the following.

a) sizeof 123456 b) sizeof “123456”

22) What is Array of pointer? Give one example.

23) What is Pointer to an array? Give one example.

24) What is the difference between Array of pointer and Pointer to Array?

25) What is Function? What are the advantages?

26) What is the difference between Call by Value & Call by reference?

27) What is Function Pointer? What is the advantage of Function Pointer?

28) What is command line arguments? What is the use of that?

29) By default Command line Arguments are treated as ????

Ans : Strings

30) Storage Classes :

a) auto b) static c) register d) extern

Explain the 4 specifications 1) Scope 2) lifetime 3) Default Value 4) Storage.

31) What is default storage class for local variable and global variables?

32) What is memory leak?

33) Can we declare register variable as gloabal?

34) Can we access the addresses of registers?

35) What is static function?

36) What is the default storage class for any function.

37) What is the recursion function? What are the advantages and disadvantages?

38) What are the difference between malloc & calloc?

39) What is the return type of malloc function.

40) What is the use of realloc function.

41) Write a program to allocate memory dynamically without using malloc and calloc functions.

42) Write a program to free the dynamic memory allocation without using free() function.

43) What is memory leak?

44) What is dangling pointer? How to avoid the dangling pointer?

45) What is structure? What are differences between Arrays and Structures?

46) What is structure padding? How to avoid structure padding?

47) Write a program to find the sizeof structure without using sizeof operator?

48) When the memory is created to the structure?

49) What are the return values of strcmp function?

50) Write a one line code to copy string into destination.

51) What are types of qualifiers? Ans : i) const ii) size

52) What is self referential structure pointer?

53) What is enum? What are the advantages?

54) What is typedef? What are the advantages?

55) What is FILE in C? What is the size of that?

56) What is union? What are the advantages?

57) What are differences between Structure and Union?

58) What are the differences between macros and fucntions?

59) What is the difference between #define and typedef?

60) What are the default file pointers of a program?

61) What is the difference between strcpy and memcpy?

62) What does Header file and Libraries contains?