

C Language Questions and Answers



Abstract

This PDF contains 100+ Q&A on C Language to help you remind yourself of basic concepts and definitions. Especially helpful for Interviews and quick references.

C Programs Online

1. What does static variable mean?
2. What is a pointer?
3. What are the uses of a pointer?
4. What is a structure?
5. What is a union?
6. What are the differences between structures and union?
7. What are the differences between structures and arrays?
8. In header files whether functions are declared or defined?
9. What are the differences between malloc () and calloc ()?
10. What are macros? What are its advantages and disadvantages?
11. Difference between pass by reference and pass by
12. What is static identifier?
13. Where is the auto variables stored?
14. Where does global, static, and local, register
15. Difference between arrays and linked list?
16. What are enumerations?
17. Describe about storage allocation and scope of
18. What are register variables? What are the advantages
19. What is the use of typedef?
20. Can we specify variable field width in a scanf()
21. Out of fgets() and gets() which function is safe to use and why?
22. Difference between strdup and strcpy?
23. What is recursion?

24. Differentiate between a for loop and a while loop? What are its uses?
25. What is storage class? What are the different storage classes in C?
26. What are the advantages of using Unions?
27. What is the difference between Strings and Arrays?
28. What is a far pointer? where we use it?
29. What is a huge pointer?
30. What is a normalized pointer, how do we normalize a pointer?
31. What is near pointer.
32. In C, why is the void pointer useful? When would you use it?
33. What is a NULL Pointer? Whether it is same as an uninitialized pointer?
34. Are pointers integer ?
35. What does the error 'Null Pointer Assignment' mean and what causes this error?
36. What is generic pointer in C?
37. Are the expressions arr and &arr same for an array of integers?
38. How pointer variables are initialized ?
39. What is static memory allocation ?
40. What is dynamic memory allocation?
41. What is the purpose of realloc ?
42. What is pointer to a pointer.
43. What is an array of pointers ?
44. Difference between linker and linkage ?
45. Is it possible to have negative index in an array?
46. Why is it necessary to give the size of an array in an array declaration ?

47. What modular programming ?
48. What is a function ?
49. What is an argument ?
50. What are built in functions ?
51. Difference between formal argument and actual argument ?
52. Is it possible to have more than one main() function in a C program ?
53. What is the difference between an enumeration and a set of pre-processor # defines?
54. How are Structure passing and returning implemented by the compiler?
55. What is the similarity between a Structure, Union and enumeration?
56. Can a Structure contain a Pointer to itself?
57. How can we read/write Structures from/to data files?
58. Write a program which employs Recursion ?
59. Write a program which uses Command Line Arguments?
60. Difference between array and pointer ?
61. What do the 'c' and 'v' in argc and argv stand for?
62. What are C tokens ?
63. What are C identifiers?
64. Difference between syntax vs logical error?
65. What is preincrement and post increment ?
66. Write a program to interchange 2 variables without using the third one.
67. What is the maximum combined length of command line arguments including the space between adjacent arguments?

68. What are bit fields? What is the use of bit fields in a Structure declaration?
69. What is a preprocessor, What are the advantages of preprocessor ?
70. What are the facilities provided by preprocessor ?
71. What are the two forms of #include directive ?
72. How would you use the functions randomize() and random()?
73. What do the functions atoi(), itoa() and gcvt() do?
74. How would you use the functions fseek(), freed(), fwrite() and ftell()?
75. What is the difference between the functions memmove() and memcpy()?
76. What is a file ?
77. What are the types of file?
78. What is a stream ?
79. What is meant by file opening ?
81. What is a file pointer ?
82. How is fopen()used ?
83. How is a file closed ?
84. What is a random access file ?
85. What is the purpose of ftell ?
86. What is the purpose of rewind() ?
87. Difference between a array name and a pointer variable ?
88. Represent a two-dimensional array using pointer ?
89. Difference between an array of pointers and a pointer to an array ?
90. Can we use any name in place of argv and argc as command line arguments ?
91. What are the pointer declarations used in C?

92. Differentiate between a constant pointer and pointer to a constant ?
93. Is the allocated space within a function automatically deallocated when the function returns?
94. Discuss on pointer arithmetic?
95. What are the invalid pointer arithmetic ?
96. What are the advantages of using array of pointers to string instead of an array of strings?
97. Are the expressions `*ptr ++` and `++ *ptr` same ?
98. What would be the equivalent pointer expression for referring the same element as `a[p][q][r][s]` ?
99. Are the variables `argc` and `argv` always local to `main` ?
100. Can `main ()` be called recursively?
101. Can we initialize unions?
102. What's the difference between these two declarations?
103. Why doesn't this code: `a[i] = i++;` work?
104. Why doesn't `struct x { ... }; x thestruct;` work?
105. Why can't we compare structures?
106. How are structure passing and returning implemented?