https://programming-with-muksini.vercel.app/

BASIC C++ QUESTINS

1. Write a program to print "Hello, World!".
2. Write a program to add two integers.
3. Write a program to find the size of different data types.
4. Write a program to swap two numbers using a temporary variable.
5. Write a program to calculate the area of a circle.
6. Write a program to convert temperature from Celsius to Fahrenheit.
7. Write a program to check if a number is even or odd.
8. Write a program to find the largest of two numbers.
9. Write a program to find ASCII value of a character.
10. Write a program to compute the sum of digits of a number.

Control Structures (11–25)

11. Write a program to find whether a number is positive, negative, or zero.

12. Write a program to check whether a year is a leap year.
13. Write a program to print numbers from 1 to 100.
14. Write a program to print the multiplication table of a number.
15. Write a program to find the factorial of a number using a loop.
16. Write a program to find the reverse of a number.
17. Write a program to count the number of digits in a number
18. Write a program to calculate the sum of first N natural numbers.
19. Write a program to print all even numbers from 1 to 100.
20. Write a program to check if a number is prime.
21. Write a program to generate Fibonacci series up to N terms.
22. Write a program to print a number pattern (e.g., triangle).
23. Write a program to find the power of a number using loops.
24. Write a program to check if a number is a palindrome.
25. Write a program to find LCM and GCD of two numbers.

Functions (26–35)

26. Write a function to find the maximum of three numbers.

27. **Write a function to compute the factorial of a number.**

28. **Write a function to check if a number is a prime number.**

29. **Write a program to demonstrate function call by value.**

30. **Write a program to demonstrate function call by reference using pointers.**

31. **Write a function to compute the sum of digits.**

32. **Write a recursive function to compute factorial.**

33. **Write a recursive function to generate Fibonacci series.**

34. **Write a function to reverse a number.**

35. **Write a function to swap two numbers using pointers.**

Arrays (36–50)

36. **Write a program to read and print elements of an array.**

37. **Write a program to find the sum and average of elements in an array.**
38. **Write a program to find the largest element in an array**

39. **Write a program to find the smallest element in an array.**

40. **Write a program to copy elements from one array to another.**

41. **Write a program to reverse an array.**

42. **Write a program to search for an element in an array.**

43. **Write a program to sort an array using bubble sort.**

44. **Write a program to merge two arrays.**

45. **Write a program to insert an element at a specific position in an array.**

46. **Write a program to delete an element from an array.**

47. **Write a program to count even and odd elements in an array.**

48. **Write a program to find the second largest element in an array.**

49. **Write a program to find duplicate elements in an array.**

50. **Write a program to count frequency of each element in an array.**

Strings (51–65)

51. **Write a program to read and print a string.**

52. **Write a program to find the length of a string.**

53. **Write a program to copy one string to another.**

54. **Write a program to reverse a string.**

55. Write a program to concatenate two strings.

56. Write a program to compare two strings.

57. Write a program to count vowels and consonants in a string.

58. Write a program to count the number of words in a string.

59. Write a program to check whether a string is palindrome.

60. Write a program to convert a string to uppercase.

61. Write a program to convert a string to lowercase.

62. Write a program to find a substring in a string.

63. Write a program to remove spaces from a string.

64. Write a program to remove all vowels from a string.
65. Write a program to find the frequency of characters in a string

Pointers (66–75)

66. Write a program to demonstrate the use of pointers.

67. Write a program to swap two numbers using pointers.

68. Write a program to find the sum of an array using pointers.

69. Write a program to reverse an array using pointers.

70. Write a program to access array elements using pointers.

71. **Write a program to print addresses of elements in an array.**

72. **Write a program to find length of a string using pointer.**

73. **Write a program to copy a string using pointers.**

74. **Write a program to compare two strings using pointers.**

75. **Write a program to pass pointer to a function.**

Structures and Unions (76–85)

76. **Define a structure for student and display student data.**
77. **Write a program to read and display employee details.**

78. **Write a program to store and display book details using array of structures.**

79. **Write a program to add two distances (feet and inches) using structures.**

80. **Write a program to demonstrate nested structures.**

81. **Write a program to sort records using structure.**

82. **Write a program to store and display date using structure.**

83. **Write a program to use union and display data.**

84. **Write a program to demonstrate difference between structure and union.**

85. **Write a program to pass structure to function.**

File Handling (86–90)

86. **Write a program to create and write into a file.**

87. **Write a program to read content from a file.**

88. **Write a program to copy content of one file to another.**
89. **Write a program to count characters, words and lines in a file.**

90. **Write a program to append data to an existing file.**

Dynamic Memory Allocation (91–95)

91. **Write a program to use malloc () to create an integer array.**

92. **Write a program to reallocate memory using realloc().**

93. **Write a program to free allocated memory using free().**

94. **Write a program to use calloc() for allocating memory.**

95. **Write a program to store N numbers using dynamic memory allocation.**

Miscellaneous / Advanced (96–100)

96. **Write a program to implement a calculator using switch case.**

97. **Write a program to implement binary search.**

98. **Write a program to find transpose of a matrix.**

99. **Write a program to add two matrices.**

100. **Write a program to multiply two matrices.**

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