



C Programs

C Programs: Practicing and solving problems is the best way to learn anything. Here, we have provided 100+ C programming examples in different categories like basic C Programs, Fibonacci series in C, String, Array, Base Conversion, Pattern Printing, Pointers, etc. These C programs are the most asked interview questions from basic to advanced level.



C Program Topics:

- [Basic C Programs](#)
- [Control Flow Programs](#)
- [Pattern Printing Programs](#)
- [Functions Programs](#)
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C Program – Basic

1. [C Hello World Program](#)
2. [C Program to Print Your Own Name](#)
3. [C Program to Print an Integer Entered By the User](#)

4. [C Program to Add Two Numbers](#)
5. [C Program to Check Whether a Number is Prime or Not](#)
6. [C Program to Multiply two Floating-Point Numbers](#)
7. [C Program to Print the ASCII Value of a Character](#)
8. [C Program to Swap Two Numbers](#)
9. [C Program to Calculate Fahrenheit to Celsius](#)
10. [C Program to Find the Size of int, float, double, and char](#)
11. [C Program to Add Two Complex Numbers](#)
12. [C Program to Print Prime Numbers From 1 to N](#)
13. [C Program to Find Simple Interest](#)
14. [C Program to Find Compound Interest](#)
15. [C Program for Area And Perimeter Of Rectangle](#)

C Program – Control Flow

1. [C Program to Check Whether a Number is Positive, Negative, or Zero](#)
2. [C Program to Check Whether Number is Even or Odd](#)
3. [C Program to Check Whether a Character is Vowel or Consonant](#)
4. [C Program to Find Largest Number Among Three Numbers](#)
5. [C Program to Calculate Sum of Natural Numbers](#)
6. [C Program to Print Alphabets From A to Z Using Loop](#)
7. [C Program to Check Leap Year](#)
8. [C Program to Find Factorial of a Number](#)
9. [C Program to Make a Simple Calculator](#)
10. [C Program to Generate Multiplication Table](#)
11. [C Program to Print Fibonacci Series](#)
12. [C Program to Find LCM of Two Numbers](#)
13. [C Program to Check Armstrong Number](#)
14. [C Program to Display Armstrong Numbers Between 1 to 1000](#)
15. [C Program to Display Armstrong Number Between Two Intervals](#)
16. [C Program to Reverse a Number](#)
17. [C Program to Check Whether a Number is a Palindrome or Not](#)
18. [C Program to Check Whether a Number is Prime or Not](#)
19. [C Program to Display Prime Numbers Between Intervals](#)
20. [C Program to Check whether the input number is a Neon Number](#)
21. [C Program to Find All Factors of a Natural Number](#)

22. [C program to Sum of Fibonacci Numbers at Even Indexes up to N Terms](#)

C Program – Pattern Printing

1. [C Program to Print Simple Pyramid Pattern](#)
2. [C Program to Print Given Triangle](#)
3. [C Program to Print 180° Rotation of Simple Pyramid](#)
4. [C Program to Print Inverted Pyramid](#)
5. [C Program to Print Number Pattern](#)
6. [C Program to Print Character Pattern](#)
7. [C Program to Print Continuous Character Pattern](#)
8. [C Program to Print Hollow Star Pyramid](#)
9. [C Program to Print Inverted Hollow Star pyramid](#)
10. [C Program to Print Hollow Star Pyramid in a Diamond Shape](#)
11. [C Program to Print Full Diamond Shape Pyramid](#)
12. [C Program to Print Pascal's Pattern Triangle Pyramid](#)
13. [C Program to Print Floyd's Pattern Triangle Pyramid](#)
14. [C Program to Print Reverse Floyd pattern Triangle Pyramid](#)

C Program – Functions

1. [C Program to Check Prime Number By Creating a Function](#)
2. [C Program to Display Prime Numbers Between Two Intervals Using Functions](#)
3. [C Program to Find All Roots of a Quadratic Equation](#)
4. [C Program to Check Whether a Number can be Express as Sum of Two Prime Numbers](#)
5. [C Program to Find the Sum of Natural Numbers using Recursion](#)
6. [C Program to Calculate the Factorial of a Number Using Recursion](#)
7. [C Program to Find G.C.D Using Recursion](#)
8. [C Program to Reverse a Stack using Recursion](#)
9. [C Program to Calculate Power Using Recursion](#)

C Program – Arrays

1. [C Program to Print a 2D Array](#)
2. [C Program to Find the Largest Element in an Array](#)
3. [C Program to Find the Maximum and Minimum in an Array](#)
4. [C Program to Search an Element in an Array \(Binary search\)](#)
5. [C Program to Calculate the Average of All the Elements Present in an Array](#)
6. [C Program to Sort an Array using Bubble Sort](#)
7. [C Program to Sort an Array using Merge Sort](#)
8. [C Program to Sort an Array Using Selection Sort](#)
9. [C Program to Sort an Array Using Insertion Sort](#)
10. [C Program to Sort the Elements of an Array in Descending Order](#)
11. [C Program to Sort the Elements of an Array in Ascending Order](#)
12. [C Program to Remove Duplicate Elements From a Sorted Array](#)
13. [C Program to Merge Two Arrays](#)
14. [C Program to Remove All Occurrences of an Element in an Array](#)
15. [C Program to Find Common Array Elements](#)
16. [C Program to Copy All the Elements of One Array to Another Array](#)
17. [C Program For Array Rotation](#)
18. [C Program to Sort the 2D Array Across Rows](#)
19. [C Program to Check Whether Two Matrices Are Equal or Not](#)
20. [C Program to Find the Transpose](#)
21. [C Program to Find the Determinant of a Matrix](#)
22. [C Program to Find the Normal and Trace](#)
23. [C Program to Add Two Matrices](#)
24. [C Program to Multiply Two Matrices](#)
25. [C Program to Print Boundary Elements of a Matrix](#)
26. [C Program to Rotate Matrix Elements](#)
27. [C Program to Compute the Sum of Diagonals of a Matrix](#)
28. [C Program to Interchange Elements of First and Last in a Matrix Across Rows](#)
29. [C Program to Interchange Elements of First and Last in a Matrix Across Columns](#)

C Program – Strings

1. [C Program to Add or Concatenate Two Strings](#)
2. [C Program to Add 2 Binary Strings](#)
3. [C Program to Get a Non-Repeating Character From the Given String](#)
4. [C Program to check if the string is palindrome or not](#)
5. [C Program to Reverse an Array or String](#)
6. [C program to Reverse a String Using Recursion](#)
7. [C Program to Find the Length of a String](#)
8. [C Program to Sort a String](#)
9. [C Program to Check For Pangram String](#)
10. [C Program to Print the First Letter of Each Word](#)
11. [C Program to Determine the Unicode Code Point at a Given Index](#)
12. [C Program to Remove Leading Zeros](#)
13. [C Program to Compare Two Strings](#)
14. [C Program to Compare Two Strings Lexicographically](#)
15. [C Program to Insert a String into Another String](#)
16. [C Program to Split a String into a Number of Sub-Strings](#)

C Program – Conversions

1. [C Program For Boolean to String Conversion](#)
2. [C Program For Float to String Conversion](#)
3. [C Program For Double to String Conversion](#)
4. [C Program For String to Long Conversion](#)
5. [C Program For Long to String Conversion](#)
6. [C Program For Int to Char Conversion](#)
7. [C Program For Char to Int Conversion](#)
8. [C Program For Octal to Decimal Conversion](#)
9. [C Program For Decimal to Octal Conversion](#)
10. [C Program For Hexadecimal to Decimal Conversion](#)
11. [C Program For Decimal to Hexadecimal Conversion](#)
12. [C Program For Decimal to Binary Conversion](#)
13. [C Program For Binary to Decimal Conversion](#)

C Program – Pointers

1. [How to Return a Pointer from a Function in C](#)
2. [How to Declare a Two-Dimensional Array of Pointers in C?](#)
3. [C Program to Find the Largest Element in an Array using Pointers](#)
4. [C Program to Swap Two Numbers](#)
5. [C Program to Sort an Array using Pointers](#)
6. [C Program to Sort a 2D Array of Strings](#)
7. [C Program to Check if a String is a Palindrome using Pointers](#)
8. [C Program to Create a Copy of a Singly Linked List using Recursion](#)

C Program – Structures and Unions

1. [C Program to Store Information of Students Using Structure](#)
2. [C Program to Store Student Records as Structures and Sort them by Name](#)
3. [C Program to Add N Distances Given in inch-feet System using Structures](#)
4. [C Program to Add Two Complex Numbers by Passing Structure to a Function](#)
5. [C Program to Store Student Records as Structures and Sort them by Age or ID](#)
6. [Read/Write Structure to a File in C](#)
7. [Flexible Array Members in a Structure in C](#)

C Program – File IO

1. [C Program to Create a Temporary File](#)
2. [C Program to Read/Write Structure to a File](#)
3. [C Program to Rename a file](#)
4. [C Program to Make a File Read-Only](#)
5. [C program to Compare Two Files and Report Mismatches](#)
6. [C Program to Copy One File into Another File](#)

7. [C Program to Print all the Patterns that Match Given Pattern From a File](#)
8. [C Program to Append the Content of One Text File to Another](#)
9. [C Program to Read Content From One File and Write it Into Another File](#)
10. [C Program to Read and Print all Files From a Zip File](#)

C Program – Date and Time

1. [C Program to Format time in AM-PM format](#)
2. [C program to Print Digital Clock with the Current Time](#)
3. [C Program to Display Dates of Calendar Year in Different Formats](#)
4. [C Program to Display Current Date and Time](#)
5. [C Program to Maximize Time by Replacing ‘_’ in a Given 24-Hour Format Time](#)
6. [C Program to Convert the Local Time to GMT](#)
7. [C Program to Convert Hours into Minutes and Seconds](#)

C Program – More C Programs

1. [C Program to Show Runtime exceptions](#)
2. [C Program to Show Types of errors](#)
3. [C Program to Show Unreachable Code Error](#)
4. [C Program to Find Quotient and Remainder](#)
5. [C Program to Find the Initials of a Name](#)
6. [C Program to Draw a Circle in Graphics](#)
7. [Printing Source Code of a C Program Itself](#)

FAQs on C Program

Q1: What is C programming?

Answer:

C is a structured, high-level, and general-purpose programming language, developed in the early 1970s by Dennis Ritchie at Bell Labs.