**250+ Programs**

# 1. Simple Questions

* Area and Circumference of a Circle
* Print Ascii Value of the Character
* [Area of Triangle](https://cstutorialpoint.com/c-program-to-find-area-of-triangle/)
* Convert a Person’s Name in Abbreviated
* [Simple Interest](https://cstutorialpoint.com/c-program-to-calculate-simple-interest-and-compound-interest/)
* Gross Salary of an Employee
* [Percentage of 5 Subjects](https://cstutorialpoint.com/c-program-to-take-input-student-marks-find-total-calculate-percentage-and-grade/)
* [Converting Temperature Celsius into Fahrenheit](https://cstutorialpoint.com/c-program-to-convert-temperature-from-celsius-to-fahrenheit-and-fahrenheit-to-celsius/)
* The Display Size of the Different Data Type
* [Factorial of a Given Number](https://cstutorialpoint.com/c-program-to-find-factorial-of-a-number/)
* Read Integer (N) and Print the First Three Powers (N^1, N^2, N^3)
* [Area of a Circle](https://cstutorialpoint.com/c-program-to-find-area-of-circle/)
* LCM of Two Numbers
* GCD of Two Numbers

# 2. If/Else Statement

* [The Greatest Number Among the Given Three Number](https://cstutorialpoint.com/c-program-to-find-largest-of-three-numbers/)
* The Number Is Positive or Negative
* Character Is Vowel or Consonant
* A Character Is an Alphabet or Not
* Uppercase, Lowercase, Special Character, or Digit
* The Number Is Positive or Negative
* [The Number Is Even or Odd](https://cstutorialpoint.com/odd-or-even-program-in-c/)
* [Greatest of Two Numbers](https://cstutorialpoint.com/c-program-to-find-largest-of-two-numbers/)
* [Greatest Among Three Numbers](https://cstutorialpoint.com/c-program-to-find-largest-of-three-numbers/)
* [Leap Year](https://cstutorialpoint.com/leap-year-program-in-c/)
* The Date Is Correct or Not
* Voting Eligibility Checker
* Find the maximum between two numbers.
* Find the maximum between the three numbers.
* Check whether a number is negative, positive or zero.
* Check whether a number is divisible by 5 and 11 or not.
* [Find whether a number is even or odd.](https://cstutorialpoint.com/odd-or-even-program-in-c/)
* [Check whether a year is a leap year or not.](https://cstutorialpoint.com/leap-year-program-in-c/)
* Check whether a character is an alphabet or not.
* Input any alphabet and check whether it is vowel or consonant.
* Input any character and check whether it is the alphabet, digit or special character.
* Check whether a character is an uppercase or lowercase alphabet.
* Input week number and print weekday.
* Input month number and print number of days in that month.
* Count the total number of notes in a given amount.
* Input angles of a triangle and check whether the triangle is valid or not.
* Input all sides of a triangle and check whether the triangle is valid or not.
* Check whether the triangle is an equilateral, isosceles or scalene triangle.
* Find all roots of a quadratic equation.
* Calculate profit or loss.

# 3. Loops

## 1. While Loop or While-Do Loop Questions

* Reverse A given Number
* Find Number Is Armstrong Or Not
* Calculate Sum of Natural Numbers
* Display Fibonacci Series
* Find LCM of two Numbers
* Reverse a Number
* Check Whether a Number is A Palindrome or Not
* Count Number of Digits of an Integer
* Find A Generic Root Of Number
* Print A Calendar Taking Input From User Using Loop
* Number Is Divisible By 11 Using (VEDIC MATH)
* Denomination of an Amount

## 2. Do-While Loop Questions

Solve the above program using Do-While Loop

## 3. For Loop Questions

* Generate IP (Internet Protocol) Addresses Using
* Print Multiplication Table Using
* Sort A Float Array In Ascending And Descending Order Using
* Find GCD of two Numbers Using

# 4. Switch Case

* Temperature Conversion Celsius To Fahrenheit And Vice Versa
* Find The Day
* Calculator
* Find A Grade Of Given Marks or (Find a Grade of Given Marks Using Switch Case)
* Find Radius, Circumference and Volume of Cylinder
* Remove All Vowels From A String
* Print day of week name using switch case.
* Print total number of days in a month using switch case.
* Check whether an alphabet is a vowel or consonant using a switch case.
* Find the maximum between two numbers using the switch case.
* Check whether a number is even or odd using a switch case.
* Check whether a number is positive, negative or zero using a switch case.
* Find roots of a quadratic equation using switch case.
* Create a Simple Calculator using a switch case.

# 5. Array Questions

* Insert An Element Desired or Specific Position In An Array
* Remove Duplicates Items In An Array
* Delete Element From Array At Desired Or Specific Position
* Print “I AM IDIOT” Instead Of Your Name Using Array
* Check String Is Palindrome Or Not Using For Loop
* Convert All Input String Simultaneously Into Asterisk ( \* )
* Read and print elements of the array. – using recursion.
* Print all negative elements in an array.
* Sum of all array elements. – using recursion.
* Find a maximum and minimum element in an array. – using recursion.
* Get the second largest element in an array.
* Count the total number of even and odd elements in an array.
* Count the total number of negative elements in an array.
* Copy all elements from an array to another array.
* Insert an element in an array.
* Delete an element from an array at the specified position.
* Count frequency of each element in an array.
* Print all unique elements in the array.
* Count the total number of duplicate elements in an array.
* Delete all duplicate elements from an array.
* Merge two arrays to the third array.
* Find the reverse of an array.
* Put even and odd elements of an array in two separate arrays.
* Search an element in an array.
* Sort array elements in ascending or descending order.
* Sort even and odd elements of the array separately.
* Left rotate an array.
* Right rotate an array.

# 6. Matrix Questions

* Add two matrices.
* Subtract two matrices.
* Perform scalar matrix multiplication.
* Multiply two matrices.
* Check whether two matrices are equal or not.
* Sum of the main diagonal elements of a matrix.
* Find the sum of minor diagonal elements of a matrix.
* Find the sum of each row and column of a matrix.
* Interchange diagonals of a matrix.
* The upper triangular matrix.
* Find a lower triangular matrix.
* Sum of the upper triangular matrix.
* Find the sum of a lower triangular matrix.
* The transpose of a matrix.
* Find determinant of a matrix.
* Identity matrix in C.
* Check the sparse matrix.
* Check the symmetric matrix.

# 7. String Questions List

* String Char-Case Change
* A String is Palindrome or Not
* A String Is an Anagram or Not
* Find the length of a string.
* Copy one string to another string.
* Concatenate two strings.
* Compare two strings.
* Convert lowercase string to uppercase.
* Convert uppercase string to lowercase.
* Toggle case of each character of a string.
* Find a total number of alphabets, digits or special character in a string.
* Count the total number of vowels and consonants in a string.
* Count the total number of words in a string.
* Find the reverse of a string.
* Check whether a string is a palindrome or not.
* Reverse order of words in a given string.

# 8. String Questions: Level Up

* Find the first occurrence of a character in a given string.
* Find the last occurrence of a character in a given string.
* Search all occurrences of a character in a given string.
* Count occurrences of a character in a given string.
* Find the highest frequency character in a string.
* Find the lowest frequency character in a string.
* Count the frequency of each character in a string.
* Remove the first occurrence of a character from a string.
* Remove the last occurrence of a character from a string.
* Delete all occurrences of a character from a string.
* Remove all repeated characters from a given string.
* Replace the first occurrence of a character with another in a string.
* Replace the last occurrence of a character with another in a string.
* Put all occurrences of a character with another in a string.
* Find the first occurrence of a word in a given string.
* Find the last occurrence of a word in a given string.
* Search all occurrences of a word in a given string.
* Count occurrences of a word in a given string.
* Remove the first occurrence of a word from the string.
* Remove the last occurrence of a word in a given string.
* Delete all occurrence of a word in a given string.
* A Trim leading white space characters from a given string.
* Trim trailing white space characters from a given string.
* Trim both leading and trailing white space characters from a given string.
* Remove all extra blank spaces from the given string.

# 9. Function Questions

* Cube of any number using the function.
* Find diameter, circumference and area of a circle using functions.
* Maximum and minimum between two numbers using functions.
* Check whether a number is even or odd using functions.
* Check whether a number is prime, Armstrong or perfect number using functions.
* Find all prime numbers between the given interval using functions.
* Print all strong numbers between the given interval using functions.
* Armstrong numbers between the given interval using functions.
* Print all perfect numbers between the given interval using functions.
* Find the power of any number using recursion.
* Print all natural numbers between 1 to n using recursion.
* Print all even or odd numbers in a given range using recursion.
* Sum of all natural numbers between 1 to n using recursion.
* Find the sum of all even or odd numbers in a given range using recursion.
* Find reverse of any number using recursion.
* Check whether a number is a palindrome or not using recursion.
* Find the sum of digits of a given number using recursion.
* Find factorial of any number using recursion.
* Generate nth Fibonacci term using recursion.
* Find gcd (HCF) of two numbers using recursion.
* Find lcm of two numbers using recursion.
* Display all array elements using recursion.
* Find the sum of elements of the array using recursion.
* Find maximum and minimum elements in an array using recursion.
* Stricmp() Function (Case In-Sensitive Compare)
* Strncat() Function (String Concatenate)
* Strstr() Function (Sub-String)
* Strlwr() Function (To Lower-Case)
* Strupr() Function (To Upper-Case)
* Strncmp() Compare & Chars
* Strncpy() Copy N Chars
* Strrev() String Reverse
* Strlen() String Length
* Strcat() String Concatenate
* Strcmp() String Compare
* Strcpy() Copy the String

# 10. Pointer Questions

* Add two numbers using pointers.
* Swap two numbers using pointers.
* Input and print array elements using a pointer.
* Copy one array to another using pointer.
* Swap two arrays using pointers.
* Reverse an array using pointers.
* Search an element in an array using pointers.
* Access two-dimensional array using pointers.
* Add two matrix using pointers.
* Multiply two matrix using pointers.
* Find the length of the string using pointers.
* In short How to Copy one string to another using pointer.
* Concatenate two strings using pointers.
* Compare two strings using pointers.
* Find the reverse of a string using pointers.
* Sort array using pointers.
* Return multiple values from a function using pointers.

# 11. File Handling

* Create a file and write contents, save and close the file.
* Read file contents and display them on the console.
* Read numbers from a file and write even, odd and prime numbers to separate file.
* Append content to a file.
* Compare two files.
* How to Copy contents from one file to another file.
* Merge two files to the third file.
* Count characters, words and lines in a text file.
* Delete a word from a text file.
* Remove the specific line from a text file.
* Remove empty lines from a text file.
* Find the occurrence of a word in a text file.
* Count occurrences of a word in a text file.
* Count occurrences of all words in a text file.
* Find and replace a word in a text file.
* Replace a specific line in a text file.
* Print source code of the same program.
* Convert uppercase to the lowercase character and vice versa in a text file.
* Find properties of a file using stat() function.
* Check if a file or directory exists.
* Rename a file using rename() function.
* List all files and sub-directories recursively.

# 12. Sorting

* Bubble Sort in C
* Bucket or Radix Sort in C
* Shell Sort in C
* Merge Sort in C
* Heap Sort in C
* Selection Sort in C
* Insertion Sort in C

# 13. Searching

* Binary Search in C
* Linear Search in C
* Recursive Binary Search in C

# 14. Tricky Questions for Expert Only | Legendary level

This is a high-level section for legendary programmers or thinkers, this section can help you to become a pro programmer. In this section, two categories are the number pattern and start pattern. I just keep the pattern programming and number programming separate. All the tricky questions or we can say that number programming or start pattern programming solutions of c programming questions and answers are below.

* Number Series- C Programming Questions and Answers
* Start Pattern Printing- C Programming Questions and Answers
* Puzzles Questions

## 15. Puzzles Questions

* Print numbers from 1 to n without using a semicolon?
* Sum of two numbers without using any operator
* How to show memory representation of c variables?
* Condition to print “HelloWorld”
* Modify/add only one character and print ‘\*’ exactly 20 times
* Sum the digits of a given number in a single statement?

**For Solutions Please Visit.**

https://cstutorialpoint.com/c-programming-examples/

<https://www.programmingwithbasics.com/p/basic-c-programs-for-practice-pdf.html>

Thanks