

# 250+ Programming Problems

## 1. Simple Questions

- [Area and Circumference of a Circle](#)
- Print Ascii Value of the Character
- Area of Triangle
- Convert a Person's Name in Abbreviated
- Simple Interest
- Gross Salary of an Employee
- Percentage of 5 Subjects
- Converting Temperature Celsius into Fahrenheit
- The Display Size of the Different Data Type
- Factorial of a Given Number
- Read Integer (N) and Print the First Three Powers ( $N^1$ ,  $N^2$ ,  $N^3$ )
- Area of a Circle
- LCM of Two Numbers
- GCD of Two Numbers

## 2. If/Else Statement

- The Greatest Number Among the Given Three Number
- 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
- Greatest of Two Numbers
- Greatest Among Three Numbers
- Leap Year
- 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.
- Check whether a year is a leap year or not.
- 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.

- Recommended posts

## 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?