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# **1. Simple C Questions**

[**Area and Circumference of a Circle**](https://tutorialsbookmarks.com/area-circumference-circle-c-language/)

* **Print Ascii Value of the Character**

1. **Area of Triangle**
2. **Convert a Person’s Name in Abbreviated**
3. **Simple Interest**
4. **Gross Salary of an Employee**
5. **Percentage of 5 Subjects**
6. **Converting Temperature Celsius into Fahrenheit**
7. **The Display Size of the Different Data Type**
8. **Factorial of a Given Number**
9. **Read Integer (N) and Print the First Three Powers (N^1, N^2, N^3)**
10. **Area of a Circle**
11. **LCM of Two Numbers**
12. **GCD of Two Numbers**

# **2. If/Else Statement**

1. **The Greatest Number Among the Given Three Number**
2. **The Number Is Positive or Negative**
3. **Character Is Vowel or Consonant**
4. **A Character Is an Alphabet or Not**
5. **Uppercase, Lowercase, Special Character, or Digit**
6. **The Number Is Positive or Negative**
7. **The Number Is Even or Odd**
8. **Greatest of Two Numbers**
9. **Greatest Among Three Numbers**
10. **Leap Year**
11. **The Date Is Correct or Not**
12. **Voting Eligibility Checker**
13. **Find the maximum between two numbers.**
14. **Find the maximum between the three numbers.**
15. **Check whether a number is negative, positive or zero.**
16. **Check whether a number is divisible by 5 and 11 or not.**
17. **Find whether a number is even or odd.**
18. **Check whether a year is a leap year or not.**
19. **Check whether a character is an alphabet or not.**
20. **Input any alphabet and check whether it is vowel or consonant.**
21. **Input any character and check whether it is the alphabet, digit or special character.**
22. **Check whether a character is an uppercase or lowercase alphabet.**
23. **Input week number and print weekday.**
24. **Input month number and print number of days in that month.**
25. **Count the total number of notes in a given amount.**
26. **Input angles of a triangle and check whether the triangle is valid or not.**
27. **Input all sides of a triangle and check whether the triangle is valid or not.**
28. **Check whether the triangle is an equilateral, isosceles or scalene triangle.**
29. **Find all roots of a quadratic equation.**
30. **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**](https://www.programmingwithbasics.com/2016/03/c-program-for-find-grade-of-given-marks.html)**)**
* **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.**

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# **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?**