

Programs List for Class XII (CS)

This list is with solution. Use "Ctrl + Click" on the given program, you will be redirected to a site "<https://www.geeksforgeeks.org/>". Your programs solution will be there with python code and output.

Basic Programs:

1. Python Program for factorial of a number
2. Python Program for compound interest
3. Python Program to check Armstrong Number
4. Python program to print all Prime numbers in an Interval
5. Python program to check whether a number is Prime or not
6. Python Program for n-th Fibonacci number
7. Python Program for Fibonacci numbers
8. Python Program for How to check if a given number is Fibonacci number?
9. Python Program for n'th multiple of a number in Fibonacci Series
10. Program to print ASCII Value of a character

Array Programs:

1. Python Program to find sum of array
2. Python Program to find largest element in an array
3. Python Program for array rotation
4. Python Program for Reversal algorithm for array rotation
5. Python Program to Split the array and add the first part to the end
6. Python Program for Find remainder of array multiplication divided by n
7. Reconstruct the array by replacing arr[i] with (arr[i-1]+1) % M

List Programs:

1. Python program to interchange first and last elements in a list
2. Python program to swap two elements in a list
3. Python program to remove Nth occurrence of the given word
4. Python | Ways to find length of list
5. Python | Ways to check if element exists in list
6. Different ways to clear a list in Python
7. Python | Reversing a List
8. Python | Cloning or Copying a list
9. Python | Count occurrences of an element in a list
10. Python program to find sum of elements in list
11. Python | Multiply all numbers in the list
12. Python program to find smallest number in a list
13. Python program to find largest number in a list
14. Python program to find second largest number in a list
15. Python program to find N largest elements from a list
16. Python program to print even numbers in a list
17. Python program to print odd numbers in a List
18. Python program to print all even numbers in a range
19. Python program to print all odd numbers in a range
20. Python program to count Even and Odd numbers in a List
21. Python program to print positive numbers in a list
22. Python program to print negative numbers in a list
23. Python program to print all positive numbers in a range
24. Python program to print all negative numbers in a range
25. Python program to count positive and negative numbers in a list
26. Remove multiple elements from a list in Python

27. Python | Remove empty tuples from a list
28. Python | Program to print duplicates from a list of integers
29. Python program to find Cumulative sum of a list
30. Break a list into chunks of size N in Python
31. Python | Sort the values of first list using second list

String Programs:

1. Python program to check if a string is palindrome or not
2. Reverse words in a given String in Python
3. Ways to remove i'th character from string in Python
4. Python | Check if a Substring is Present in a Given String
5. Find length of a string in python (4 ways)
6. Python program to print even length words in a string
7. Python | Program to accept the strings which contains all vowels
8. Python | Count the Number of matching characters in a pair of string
9. Python program to count number of vowels using sets in given string
10. Remove all duplicates from a given string in Python
11. Python | Program to check if a string contains any special character
12. Generating random strings until a given string is generated
13. Find words which are greater than given length k
14. Python program for removing i-th character from a string
15. Python program to split and join a string
16. Python | Check if a given string is binary string or not
17. Python | Find all close matches of input string from a list
18. Python program to find uncommon words from two Strings
19. Python | Swap commas and dots in a String
20. Python | Permutation of a given string using inbuilt function
21. Python | Check for URL in a String
22. Execute a String of Code in Python
23. String slicing in Python to rotate a string
24. String slicing in Python to check if a string can become empty by recursive deletion
25. Python Counter| Find all duplicate characters in string

Dictionary Programs:

1. Python | Sort Python Dictionaries by Key or Value
2. Handling missing keys in Python dictionaries
3. Python dictionary with keys having multiple inputs
4. Python program to find the sum of all items in a dictionary
5. Python | Ways to remove a key from dictionary
6. Ways to sort list of dictionaries by values in Python – Using itemgetter
7. Ways to sort list of dictionaries by values in Python – Using lambda function
8. Python | Merging two Dictionaries
9. Program to create grade calculator in Python
10. Python | Check order of character in string using OrderedDict()
11. Python | Find common elements in three sorted arrays by dictionary intersection
12. Dictionary and counter in Python to find winner of election
13. Find all duplicate characters in string
14. Print anagrams together in Python using List and Dictionary
15. K'th Non-repeating Character in Python using List Comprehension and OrderedDict
16. Check if binary representations of two numbers are anagram
17. Python Counter to find the size of largest subset of anagram words
18. Python | Remove all duplicates words from a given sentence
19. Python Dictionary to find mirror characters in a string
20. Counting the frequencies in a list using dictionary in Python

21. Python | Convert a list of Tuples into Dictionary
22. Python counter and dictionary intersection example (Make a string using deletion and rearrangement)
23. Python dictionary, set and counter to check if frequencies can become same
24. Scraping And Finding Ordered Words In A Dictionary using Python
25. Possible Words using given characters in Python

Tuple Programs:

1. Create a list of tuples from given list having number and its cube in each tuple
2. Sort a list of tuples by second Item

Searching and Sorting Programs:

1. Python Program for Binary Search (Recursive and Iterative)
2. Python Program for Linear Search
3. Python Program for Insertion Sort
4. Python Program for QuickSort
5. Python Program for Selection Sort
6. Python Program for Bubble Sort
7. Python Program for Merge Sort
8. Python Program for Heap Sort

Pattern Printing Programs:

1. Program to print the pattern 'G'
2. Python | Print an Inverted Star Pattern
3. Python 3 | Program to print double sided stair-case pattern
4. Print with your own font using Python !!

Date-Time Programs:

1. Python program to convert time from 12 hour to 24 hour format

More Python Programs:

1. Python Program to Reverse a linked list
2. Python Program for Find largest prime factor of a number
3. Python Program for Efficient program to print all prime factors of a given number
4. Python Program for Product of unique prime factors of a number
5. Python Program for Find sum of odd factors of a number
6. Python Program for Coin Change
7. Python Program for Tower of Hanoi
8. Python Program for Sieve of Eratosthenes
9. Python Program to Check if binary representation is palindrome
10. Python Program for Basic Euclidean algorithms
11. Python Program for Extended Euclidean algorithms
12. Python Program for Number of elements with odd factors in given range
13. Python Program for Common Divisors of Two Numbers
14. Python Program for Maximum height when coins are arranged in a triangle
15. Python Program for GCD of more than two (or array) numbers
16. Python Program for Check if count of divisors is even or odd
17. Python Program for Find minimum sum of factors of number
18. Python Program for Difference between sums of odd and even digits
19. Python Program for Program to Print Matrix in Z form
20. Python Program for Largest K digit number divisible by X
21. Python Program for Smallest K digit number divisible by X
22. Python Program for Print Number series without using any loop
23. Python Program for Number of stopping station problem
24. Python Program for Program to calculate area of a Tetrahedron
25. Python Program for focal length of a spherical mirror
26. Python Program for Find the perimeter of a cylinder

27. Check if a triangle of positive area is possible with the given angles
28. Python Program for Number of jump required of given length to reach a point of form $(d, 0)$ from origin in 2D plane
29. Python Program for Finding the vertex, focus and directrix of a parabola
30. Python program to find the most occurring character and its count
31. Python Program for Find sum of even factors of a number
32. Python Program for Check if all digits of a number divide it
33. Python program to convert float decimal to Octal number
34. Python program to convert floating to binary
35. Check whether a number has consecutive 0's in the given base or not
36. Python Program for Number of solutions to Modular Equations
37. Python Program for Triangular Matchstick Number
38. Python Program for Legendre's Conjecture
39. Python program to check if a string contains all unique characters
40. Python program to copy odd lines of one file to other