1. Introduction to Top 100 codes ASCII Table
2. Positive or Negative number:
3. Even or Odd number:
4. Sum of First N Natural numbers: 5. Sum of N natural numbers:
5. Sum of numbers in a given range:
6. Greatest of two numbers: 8. Greatest of the Three numbers:
7. Leap year or not:
8. Prime number:
9. Prime number within a given range:
10. Sum of digits of a number:
11. Reverse of a number : 14. Armstrong number :
12. Armstrong number in a given range :
13. Fibonacci Series upto nth term :
14. Find the Nth Term of the Fibonacci Series :
15. Factorial of a number :
16. Power of a number : 20. Factor of a number :
17. Finding Prime Factors of a number :
18. Strong number : 23. Perfect number :
19. Perfect Square :
20. Automorphic number : 26. Harshad number : 27. Abundant number :
21. Friendly pair :
22. Highest Common Factor(HCF):
23. Lowest Common Multiple (LCM) :
24. Greatest Common Divisor :
25. Binary to Decimal to conversion :
26. Octal to Decimal conversion :
27. Hexadecimal to Decimal conversion:
28. Decimal to Binary conversion: 36. Decimal to Octal Conversion:
29. Decimal to Hexadecimal Conversion:
30. Binary to Octal conversion :
31. Octal to Binary conversion :
32. Quadrants in which a given coordinate lies :
33. Permutations in which n people can occupy r seats in a classroom :
34. Maximum number of handshakes:
35. Addition of two fractions:
36. Replace all 0’s with 1 in a given integer :
37. Can a number be expressed as a sum of two prime numbers :
38. Count possible decoding of a given digit sequence :
39. Calculate the area of a circle :
40. Find the prime numbers between 1 to 100 :
41. Calculate the number of digits in an integer :
42. Convert digit/number to words :
43. Counting number of days in a given month of a year:
44. Finding Number of times x digit occurs in a given input :
45. Finding number of integers which has exactly x divisors:
46. Finding Roots of a quadratic equation :
47. Power of a Number –
48. Prime Number – 57. Largest element in an array

58. Smallest element in an array – 59. Reversing a Number –

60. HCF of two numbers – 61. LCM of two numbers –

1. Program to calculate length of the string using recursion-
2. Print All Permutations of a String-
3. Given an integer N the task is to print the F(N)th term.- 65. Given a list arr of N integers, print sums of all subsets in it- 66. Last non-zero digit in factorial-
4. Given a positive integer N, return the Nth row of pascal’s triangle –
5. Given an integer N representing the number of pairs of parentheses, the task is to generate all combinations of well-formed(balanced) parentheses –
6. Find the Factorial of a number using recursion –
7. Find all possible Palindromic partitions of the given String –
8. Find all the N bit binary numbers having more than or equal 1’s than 0’s –
9. Given a set of positive integers, find all its subsets –
10. Given a string s, remove all its adjacent duplicate characters recursively –
11. Find Largest element in an array :
12. Python Find Smallest Element in an Array :
13. Find the Smallest and largest element in an array :
14. Find Second Smallest Element in an Array :
15. Calculate the sum of elements in an array :
16. Reverse an Array :
17. Sort first half in ascending order and second half in descending :
18. Sort the elements of an array :
19. Finding the frequency of elements in an array :
20. Sorting elements of an array by frequency :
21. Finding the Longest Palindrome in an Array :
22. Counting Distinct Elements in an Array :
23. Finding Repeating elements in an Array :
24. Finding Non Repeating elements in an Array :
25. Removing Duplicate elements from an array :
26. Finding Minimum scalar product of two vectors :
27. Finding Maximum scalar product of two vectors in an array :
28. Counting the number of even and odd elements in an array :
29. Find all Symmetric pairs in an array :
30. Find maximum product sub-array in a given array :
31. Finding Arrays are disjoint or not :
32. Determine Array is a subset of another array or not :
33. Determine can all numbers of an array be made equal :
34. Finding Minimum sum of absolute difference of given array :
35. Sort an array according to the order defined by another array :
36. Replace each element of the array by its rank in the array : 100. Finding equilibrium index of an array :
37. Rotation of elements of array- left and right :
38. Block swap algorithm for array rotation :
39. Balanced Parenthesis Problem :
40. Check whether a character is a vowel or consonant :
41. Check whether a character is a alphabet or not :
42. Find the ASCII value of a character :
43. Length of the string without using strlen() function :
44. Toggle each character in a string :
45. Count the number of vowels :
46. Remove the vowels from a String :
47. Check if the given string is Palindrome or not :
48. Print the given string in reverse order :
49. Remove all characters from string except alphabets :
50. Remove spaces from a string :
51. Remove brackets from an algebraic expression :
52. Count the sum of numbers in a string :
53. Capitalize the first and last character of each word of a string :
54. Calculate frequency of characters in a string :
55. Find non-repeating characters in a string :
56. Check if two strings are Anagram or not :
57. Replace a sub-string in a string:
58. Replacing a particular word with another word in a string – 123. Count common sub-sequence in two strings :
59. Check if two strings match where one string contains wildcard characters :
60. Print all permutations of a given string in lexicographically sorted order :
61. Find the “Kth” max and min element of an array – 127. Move all the negative elements to one side of the array – 128. Find the Union and Intersection of the two sorted arrays.
62. Find Largest sum contiguous Subarray –
63. Minimize the maximum difference between heights – 131. Minimum no. of Jumps to reach the end of an array –

132. Find duplicate in an array of N+1 Integers – 133. Merge 2 sorted arrays without using extra space. – 134. Kadane’s Algorithm –

135. Merge Intervals – 136. Count Inversion –

1. Best time to buy and Sell stock –
2. Find all pairs on integer array whose sum is equal to given number –
3. Find if there is any subarray with sum equal to 0 – 140. Find factorial of a Large Number – 141. Find common elements In 3 sorted arrays –
4. Rearrange the array in alternating positive and negative items with O(1) extra space –
5. Given an array of size n and a number k, find all elements that appear more than ” n/k ” times.
6. Maximum profit by buying and selling a share atmost twice – 145. Next Permutation –

146. Find longest consecutive subsequence – 147. Trapping Rain water problem

1. Chocolate Distribution problem
2. Smallest Subarray with sum greater than a given value
3. Three way partitioning of an array around a given value – 151. Minimum no. of operations required to make an array palindrome –

152. Median of 2 sorted arrays of equal size – 153. Median of 2 sorted arrays of different size – 154. Spiral traversal on a Matrix

155. Search an element in a matrix – 156. Find median in a row wise sorted matrix

1. Find row with maximum no. of 1’s –
2. Print elements in sorted order using row-column wise sorted matrix –
3. Find a specific pair in matrix – 160. Rotate matrix by 90 degrees –
4. Kth smallest element in a row-column wise sorted matrix –
5. Common elements in all rows of a given matrix –

patterns

1. Square Star
2. Hollow Square Star Pattern
3. Rhombus Star Pattern
4. Rectangle Star Pattern Hollow Rectangle Star Pattern
5. Parallelogram Star Pattern
6. Mirrored Rhombus Star Pattern
7. Triangle Star Pattern
8. Pyramid Star Pattern
9. Hollow Pyramid Star Pattern
10. Inverted Pyramid Star Pattern
11. Inverted Hollow Pyramid Star Pattern
12. Half Diamond Star Pattern
13. Half Diamond Star Pattern Inverted
14. Diamond Star Pattern
15. Number Pattern Printing
16. Basic Square 1 Pattern
17. Basic Square Incrementing Pattern

1. Basic Right Triangle Number Pattern
2. Basic Right Triangle Number Pattern (Inverted)
3. Basic incrementing Triangle Pattern initialised = 3
4. Basic incrementing Triangle
5. Basic double incrementing Triangle
6. Pattern(Inverted) initialised = 3
7. Pattern initialised = 3
8. Basic incrementing Diamond Pattern(Inverted) initialised = 3
9. Basic double incrementing Triangle
10. Pattern initialised = 3
11. Basic incrementing Triangle

1. Basic incrementing Diamond Pattern(Inverted Sandwich) initialised = 3
2. Basic double incrementing Triangle Pattern initialised Sandwich= 3

1. Basic incrementing Triangle Pattern(Inverted) initialised Mirrored
2. Sandwich = 3

1. Number Star Mix Pattern

1. Basic incrementing Squared Number- Star Pattern
2. Basic incrementing inverted Squared Number-Star Pattern

1. Basic incrementing Squared Number- Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate)

1. Basic incrementing Squared Number-
2. Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate)
3. Type 2

1. Basic incrementing Squared Number- Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate)

1. Type 3

1. Basic incrementing Squared Number- 205. Star Pattern Mirrored + Basic
2. incrementing inverted Squared Number- Star Pattern Mirrored (alternate)

1. Basic incrementing Triangle Pattern Checkout code for this program

1. Basic incrementing Triangle Pattern Checkout code for this program

1. Basic incrementing Triangle Pattern + Inverted (Mix)

1. Basic incrementing mirrored Triangle

1. Basic incrementing inverted mirrored

1. Basic incrementing Triangle Pattern +

1. Basic Diamond Number Star Pattern

1. Basic Diamond Number Star Pattern (Sandwich)

1. Basic Diamond Number Star Pattern (Sandwich Inverted)

1. Basic Diamond Number Star Pattern
2. initialised

1. Basic Diamond Number Star Pattern (Sandwich)

1. Basic Diamond Number Star Pattern (Sandwich Inverted)

1. Program for Pyramid star pattern
2. Program for Pyramid number pattern
3. Program for Palindromic Pyramid Pattern
4. Program for Diamond star pattern
5. Program for Diamond number pattern
6. Program for Floyd’s Trianlge Program for Pascal triangle – 226. Program to Check array similarity Program for

227. Program for Longest palindrome in the array