**The Preferred Approach solving the questions :**

* Understand and anylyse the problem
* Go through the sample inputs and examples thoroughly
* Break down the problem
* Start solving/coding
* Look back and learn from the mistakes.

**Easy Question :**

1. Check Whether a Character is Vowel or Consonant
2. Check whether the given character is an alphabet or not
3. Program to find the ASCII value of a character
4. Check whether a given character is upper case, lower case, number or special character
5. Program to find whether a number is positive or negative
6. Check whether the number is odd or even without using mod operator
7. Program to Swap Two Numbers Without Using Third Variable
8. Finding area of a circle
9. Find LCM of two numbers
10. Program to find the GCD or HCF of two numbers
11. Find the largest among three numbers
12. Count Number of Digits in an Integer
13. Program to Find the Sum of Digits of a Given Number
14. Find the sum of natural numbers with and without recursion
15. Program to find the sum of numbers in a given range
16. Program to Reverse a Number
17. Program to find the factorial of a number
18. Fibonacci series upto n value
19. Program to check if a given year is a leap year or not
20. Check whether a given number is a prime or not
21. Check whether a number is PALINDROME or Not
22. Check whether the number is armstrong or not
23. Program to check if a given number is a strong number or not
24. Check whether a given number is perfect number or not
25. Program to find if the given numbers are Friendly pair or not (Amicable or not)
26. Check whether a number is Automorphic number or not
27. Check whether a number is Harshad number or not (Niven number)
28. Program to check whether a number is Abundant number or not
29. Finding power of a number
30. Finding factors of a number
31. Program to add two fractions and display their sum in reduced form

**Medium Question :**

1. Find prime numbers in a given range
2. Print the Armstrong numbers between two intervals
3. Check whether a number can be expressed as a sum of two prime numbers
4. Program to replace all 0's with 1 in a given integer
5. Convert the given Binary Number into Decimal
6. Convert a number from decimal to binary
7. Convert decimal to octal number in
8. Convert a number from octal to decimal
9. Convert a number from binary to octal
10. Convert a number from octal to binary
11. Program to find the maximum number of handshakes
12. Program to find the quadrant in which the given coordinates lie
13. Program to convert a given number to words
14. Program to find the number of days in a given month of a given year
15. Find all possible permutations in which 'n' people can occupy 'r' seats in a theater
16. Find the number of times digit 3 occurs in each and every number from 0 to n
17. Program to find the number of integers with exactly 9 divisors
18. Finding all the roots of a quadratic equation
19. Find the possible number of decodings of a given digit sequence

**Pattern printing Question :**

1. Program to print solid and hollow rectangle star pattern
2. Pyramid pattern using stars or Pyramid star patterns
3. Pyramid pattern printing using numbers or Pyramid number patterns
4. Palindrome pyramid pattern printing using numbers
5. Diamond pattern printing using stars
6. Diamond pattern printing using numbers
7. Program to print Pascal's Triangle

**Strings Question :**

1. String operations
2. Find the Length of a String without Using strlen() Function
3. Program to toggle each character in a string
4. Find number of vowels in a character array
5. Remove vowels from a string and return the string with consonants
6. Check whether a string is PALINDROME or Not
7. Program to sort a string in alphabetical order
8. Remove brackets from an algebraic string/expression
9. Remove all Characters in a String Except Alphabet
10. Program to remove spaces from a string
11. Find the sum of all numbers present in a string
12. Capitalizing the first and last letter of each word in a Line
13. Program to find the frequency of characters in a string
14. Find the first non-repeating character in a string
15. Check if Two Strings are anagrams or not
16. Program to find all the patterns of 0(1+)0 in the given string
17. Program to Replace a Substring in a String
18. Program to count the common sub sequence of two strings
19. Program to reverse a string
20. Check if two strings match where one string contains wildcard characters

**1-D Arrays Question :**

1. Program to insert, delete and search an element in an array
2. Finding the Smallest and Largest Element in an Array
3. Program to find the sum of elements of an array
4. Program to check if two arrays are equal or not
5. Program to find the array type (even, odd or mixed array)
6. Program to find the sum of perfect square elements in an array
7. Program to find the second smallest element in an array
8. Sorting the elements of an array
9. Program to reverse the elements of an array
10. Program to find the largest palindrome in an array
11. Program to find non repeating element in an array (Unique elements)
12. Program to find repeating element in an array (duplicate elements)
13. Program to remove duplicate elements in an array
14. Program to find the minimum scalar product of two vectors (dot product)
15. Program to find the maximum scalar product of two vectors
16. Program to check if all the numbers of an array can be made equal
17. Find all the Missing Elements of a Range
18. Find all Triplets with the given sum in the given array
19. Program to count the number of even and odd elements in an array
20. Program to find the frequency of each element of an array
21. Program to find all symmetric pairs in an array
22. Program to find the maximum product subarray in a given array
23. Check if the given arrays are disjoint
24. Find if an array is a subset of another array
25. Program to check if all the numbers of an array can be made equal
26. Finding the Sum of Minimum Absolute Difference of the given Array
27. Sorting elements of an array by frequency
28. Sort an Array According to the Order defined by Another array
29. Replacing elements by its rank in the given array
30. Find the Equilibrium Index of an Array
31. Array rotation - Left and right
32. Block swap algorithm for array rotation
33. Juggling algorithm for array rotation
34. Circular rotation of an array by K positions
35. Convert the given array into zigzag pattern
36. Merge two sorted arrays
37. Program to Find the Longest Subarray having average greater than or equal to k
38. Rearrange positive and negative numbers in an array
39. Sum of all Odd Frequency Elements in an Array
40. Program to find the median of two sorted arrays
41. 0-1 Knapsack problem

**2-D Arrays Question :**

1. Program to perform matrix addition, matrix subtraction, matrix multiplication
2. Program to find the transpose of a matrix
3. Program to find if the given matrix is upper triangular or not
4. Program to find if the given matrix is lower triangular or not
5. Program to find the minimum and maximum element in each row of a matrix
6. Find the minimum and maximum element in each column of a matrix.
7. Program to find sum of elements in each row and each column of the given matrix and print the greatest of the same
8. Program to find the saddle point coordinates in a given matrix
9. Sum of elements in the Zigzag sequence in a given matrix
10. Program to print the sum of boundary elements of a matrix
11. Spiral Matrix Printing | Print the elements of a matrix in spiral form
12. Rotate the matrix by K times
13. Matrix rotation by 90 degrees clockwise and anticlockwise
14. Maximum size of square submatrix with all 1s in a binary matrix