- 1. Hello, World!: Write a program that prints the message "Hello, World!".
- 2. Sum of Two Numbers: Write a program that asks the user to enter two numbers, and then prints the sum of those two numbers.
- 3. Addition: Write a program that assigns three numbers to variables num1, num2 and num3, and then calculates their sum and stores it in a variable result. Finally, print the value of result.
- 4. Even or Odd: Write a program that asks the user to enter a number and then determines whether the number is even or odd.
- 5. String Concatenation: Write a program that concatenates two strings str1 and str2 and stores the result in a variable result.
- 6. Increment and Decrement: Write a program that increments and decrements the value of a variable num.
- 7. User Input: Write a program that asks the user to enter their name, stores it in a variable name, and then prints a greeting using the name.

## Programming problems to practice data types:

- 1. Write a program that swaps the values of two variables using a temporary variable.
- 2. Write a program that swaps the values of two variables without using a temporary variable.
- 3. Write a program that takes a number as input and converts it into integer, float, and string.
- 4. Write a program that takes a string as input and find the length of the string.
- 5. Write a program that takes a string as input and convert it to uppercase or lowercase.

## Programming problems to practice loops:

- 1. Write a program that prints the numbers from 1 to 10.
- 2. Write a program that prints the even numbers from 1 to 20.
- 3. Write a program that prints the sum of all numbers from 1 to 100.
- 4. Write a program that calculates the factorial of a given number.
- 5. Write a program that prints the Fibonacci sequence up to a given number.
- 6. Write a program that checks if a given number is prime.
- 7. Write a program that prints the multiplication table of a number.
- 8. Write a program that finds the largest element in an array.
- 9. Write a program that prints the reverse of a given string.
- 10. Write a program that calculates the sum of all elements in a list.

#### Programming problems to practice conditions:

- 1. Write a program that takes an integer N as input and determines whether it is even or odd.
- 2. Write a program that takes an integer N as input and determines whether it is positive, negative, or zero.
- 3. Write a program that takes three numbers as input and determines the largest among them using conditional statements.
- 4. Write a program that takes a year as input and determines whether it is a leap year or not.
- 5. Write a program that takes a student's score as input and calculates the corresponding grade based on the following conditions:
  - 90 or above: A
  - 80 to 89: B

- 70 to 79: C
- 60 to 69: D
- Below 60: F
- 6. Write a program that takes a character as input and determines whether it is a vowel or consonant.
- 7. Write a program that takes three numbers as input and determines whether their product is positive or negative.
- 8. Write a program that takes an integer N as input and determines whether it is divisible by both 5 and 7.
- 9. Write a program that takes three angles of a triangle as input and determines whether it is an equilateral, isosceles, or scalene triangle.
- 10. Write a program that takes an integer N as input and determines whether it falls within a specific range, such as 1 to 100.

# Programming problems to practice functions:

- 1. Write a function that calculates the factorial of a given number N and returns the result.
- 2. Write a function that takes a string as input and determines whether it is a palindrome or not.
- 3. Write a function that takes two integers as input and calculates their greatest common divisor.
- 4. Write functions to calculate the area of different geometric shapes such as squares, rectangles, circles, and triangles.
- 5. Write a function that takes two strings as input and determines whether they are anagrams (contain the same characters in a different order) or not.
- 6. Write functions to convert temperatures between Fahrenheit and Celsius.

## Programming problems to practice array:

- 1. Write a program that takes an array of integers as input and calculates the sum of all the elements in the array.
- 2. Write a program that takes an array of integers as input and calculates the average of all the elements in the array.
- 3. Write a program that takes an array of integers as input and determines the smallest element in the array.
- 4. Write a program that takes an array of integers as input and returns a new array with the elements in reverse order.
- 5. Write a program that takes an array of integers as input and sorts the elements in ascending or descending order.
- 6. Write a program that takes an array of integers and a target number as input and determines whether the target number is present in the array.
- 7. Write a program that takes an array of integers and a rotation count as input. Rotate the elements of the array to the right by the given rotation count.
- 8. Write a program that takes two arrays of integers as input and returns a new array containing the common elements between the two arrays.
- 9. Write a program that takes an array of integers and a value to remove as input. Remove all occurrences of the value from the array and return the modified array.

# Word Problems:

- 1. Sandip wants to buy a new smartphone that costs Rs 5000. She has saved Rs 2500 so far. How much more money does Sandip need to save?
- 2. Dheeraj is planning a road trip. The total distance he wants to cover is 800 kilometers. If he has already driven 450 kilometers, how many more kilometers does he need to

travel?

- 3. Ayushman wants to distribute 120 candies equally among his 5 friends. How many candies will each friend receive, and how many candies will be left with Ayushman?
- 4. Pln a store, a book costs Rs 250. If Kunal wants to buy 4 books, what will be the total cost?
- 5. A recipe requires 2 cups of milk, 1 cup of sugar, and 3 mangoes. If Adarsh wants to double the recipe, how much milk, sugar, and mangoes will he need?

#### **Related Posts:**

- 1. Program to prints even numbers from 1 to 20
- 2. Program to calculate sum of all numbers from 1 to 100.
- 3. Program to get factorial of a number
- 4. Program to get Fibonacci sequence
- 5. Program to checks if number is prime
- 6. Program to get multiplication table
- 7. Program to find largest element in an array
- 8. Program to prints reverse of a string
- 9. Program to calculates sum of all elements in a list
- 10. Program determines integer is positive, negative, or zero
- 11. Program to find largest among three numbers using conditional statements.
- 12. Program determines it is a leap year or not
- 13. Program to determines even or odd
- 14. Program to calculate student exam grade
- 15. Program determines character is a vowel or consonant
- 16. Program to determines product is positive or negative
- 17. Program to determine divisible by both 5 and 7
- 18. Program to determines equilateral, isosceles, or scalene triangle

- 19. Programme to check if number is inside range
- 20. Function to calculate the factorial
- 21. Write a function to detect palindromes in strings
- 22. Write a function to find the greatest common divisor of two numbers
- 23. Program to calculate the area of different geometric shapes
- 24. try-catch block in C++