

Problem 1: (Sum of Two Numbers) Write a function named *sum* that takes two integers as arguments and returns their sum. Use this function in your main program to add two user-input numbers and display the result.

Problem 2: (Find the Maximum of Three Numbers) Write a function named *findMax* that takes three integers as arguments and returns the maximum of the three. Call this function in the main program and print the maximum value.

Problem 3: (Check if a Number is Prime) Write a function named *isPrime* that takes an integer as an argument and returns true if the number is prime and false otherwise. Test this function with user input in your main program.

Problem 4: (Factorial of a Number) Write a function named *factorial* that takes a non-negative integer as an argument and returns its factorial. Use this function in the main program to compute and display the factorial of a user-input number.

Problem 5: (Calculate the Power of a Number) Write a function named *power* that takes two integers base and exponent as arguments and returns base raised to the power of exponent. Implement this using a loop (do not use the pow function from the standard library). Use this function in your main program.

Problem 6: Define a structure named *Person* with the following members:

- name (string)
- age (int)
- height (float)

Write a program that:

- Declares a Person variable.
- Accepts input for the name, age, and height from the user.
- Displays the information of the Person.

Problem 7: Create a class named *Rectangle* with two private data members: length and width. Include public methods to:

- Set the length and width.
- Calculate and return the area of the rectangle.
- Calculate and return the perimeter of the rectangle.
- Display the length and width of the rectangle.

Problem 8: Create a class named *Student* with the following private data members: name, rollNumber, and marks. Provide public methods to:

- Set the student's name, roll number, and marks.
- Display the student's details.
- Check if the student has passed, assuming the passing marks are 40.