

### Practice Problems:

- Write a C program that takes an integer input from the user and determines whether it is even or odd. Implement a function to perform this task and display an appropriate message indicating whether the number is even or odd.
- Write a C program that defines a custom function called myAbsolute to calculate and return the absolute value of an integer without using the built-in abs function or the - operator. Then, demonstrate the use of this function in your program.

#### Output:

Enter an integer: -5

The absolute value of -5 is 5.

Enter an integer: 12

The absolute value of 12 is 12.

- Create a C program that calculates the Euclidean distance between two points in a 2D plane. Prompt the user to enter the coordinates of two points (x1, y1) and (x2, y2). Use the formula:

$$\text{distance} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

#### Output:

Enter the coordinates of the first point (x1 y1): 2 3

Enter the coordinates of the second point (x2 y2): 5 7

The distance between the points (2, 3) and (5, 7) is approximately 5.00 units.