

Practice

1. Definition and Declaration of Functions:
 - a. Define a function called **greet** that prints "Hello, World!" to the console.
 - b. Create a function named **calculateSum** that takes two integers as parameters and returns their sum.
 - c. Write a function **printArray** that takes an array of integers and its size as parameters and prints all the elements.
 - d. Define a function **findMax** that takes two doubles as parameters and returns the larger value.
 - e. Create a function **isEven** that takes an integer as a parameter and returns **true** if it's even, otherwise **false**.
2. Passing Arguments (By Value, By Reference):
 - a. Write a function **incrementByValue** that takes an integer parameter and increments it by 1. Call the function and observe the changes.
 - b. Create a function **multiplyByTwo** that takes a reference to an integer as a parameter and multiplies it by 2. Print the result.
 - c. Define a function **swapValues** that takes two integers by reference and swaps their values. Print the values before and after swapping.
 - d. Write a function **modifyArray** that takes an array of doubles and its size as parameters. Multiply each element by 1.5 and print the modified array.
 - e. Create a function **appendText** that takes a reference to a string and appends " (Modified)" to it. Print the modified string.
3. Return Types and Void Functions:
 - a. Define a function **calculateArea** that takes the radius of a circle as a parameter and returns the area of the circle.
 - b. Write a function **divideNumbers** that takes two doubles as parameters and returns the result of their division.
 - c. Create a function **printRectangle** that takes two integers (width and height) as parameters and prints a rectangle of asterisks. The function should be of type void.
 - d. Define a function **findRoots** that takes three parameters (a, b, c) representing a quadratic equation. Return the roots of the equation (use the quadratic formula). If there are no real roots, return an error message.
 - e. Write a function **displayMessage** that takes a string as a parameter and displays it on the screen. The function should have a return type of **void**.