**Practical Application of Calling Methods**

**Objective:**

By the end of this activity, you will be able to call methods in C# within a complete program. You will gain hands-on experience in defining methods, calling methods with parameters, and using method return values to solve practical problems.

**Step 1: Defining and Calling a Simple Method**

Create a method that performs a task and call it in a program. This method should print a welcome message to the console.

**Instructions:**

1. Define a method named DisplayWelcomeMessage that prints "Welcome to our Program!" to the console.
2. Call the method to display the message.

**Code:**

class CallingMethods

{

static void Main()

{

// Step 1

DisplayWelcomeMessage();

// Step 2

Console.Write("Input your name: ");

string? input = Console.ReadLine();

if (string.IsNullOrWhiteSpace(input))

{

Console.WriteLine("Input cannot be empty. Please try again.");

return;

}

DisplayWelcomeMessageWithName(input);

// Step 3

Console.WriteLine("Let's calculate the sum of two values.");

Console.Write("Input a: ");

input = Console.ReadLine();

if (string.IsNullOrWhiteSpace(input) || !int.TryParse(input, out int a))

{

Console.WriteLine("Invalid input for 'a'. Please enter a valid number.");

return;

}

Console.Write("Input b: ");

input = Console.ReadLine();

if (string.IsNullOrWhiteSpace(input) || !int.TryParse(input, out int b))

{

Console.WriteLine("Invalid input for 'b'. Please enter a valid number.");

return;

}

int result = CalculateSum(a, b);

Console.WriteLine($"The sum of {a} and {b} is {result}.");

// Step 4

Console.WriteLine("Let's check if a number is positive.");

Console.Write("Input a number: ");

input = Console.ReadLine();

if (string.IsNullOrWhiteSpace(input) || !int.TryParse(input, out int number))

{

Console.WriteLine("Invalid input. Please enter a valid number.");

return;

}

bool isPositive = IsPositive(number);

if (isPositive)

{

Console.WriteLine("The number is positive.");

}

else

{

Console.WriteLine("The number is negative.");

}

// Step 5

Console.WriteLine("Let's check if you're old enough to drive.");

Console.Write("Input your age: ");

input = Console.ReadLine();

if (string.IsNullOrWhiteSpace(input) || !int.TryParse(input, out int age))

{

Console.WriteLine("Invalid age input. Please enter a valid number.");

return;

}

bool canDrive = IsOldEnoughToDrive(age);

if (canDrive)

{

Console.WriteLine("You are old enough to drive.");

}

else

{

Console.WriteLine("Sorry, you are not old enough to drive.");

}

}

static void DisplayWelcomeMessage()

{

Console.WriteLine("Welcome to our Program!");

}

static void DisplayWelcomeMessageWithName(string name)

{

Console.WriteLine("Hello " + name + "!");

}

static int CalculateSum(int x, int y)

{

return x + y;

}

static bool IsPositive(int number)

{

return number >= 0;

}

static bool IsOldEnoughToDrive(int age)

{

return age >= 18;

}

}