#include <iostream> // Include the iostream library for input and output

using namespace std; // Use the standard namespace

int main() {

int num1, num2, sum; // Declare variables to store two numbers and their sum

// Ask the user to enter two numbers

cout << "Enter the first number: ";

cin >> num1; // Read the first number

cout << "Enter the second number: ";

cin >> num2; // Read the second number

sum = num1 + num2; // Calculate the sum of the two numbers

// Display the result

cout << "The sum of " << num1 << " and " << num2 << " is " << sum << endl;

return 0; // Indicate successful program execution

}

**Explanation**

1. **Headers and Namespace**:
   * #include <iostream>: Required for input (cin) and output (cout).
   * using namespace std: Avoids writing std:: before cin and cout.
2. **Variables**:
   * num1 and num2 store the input numbers.
   * sum stores the result of adding num1 and num2.
3. **Input/Output**:
   * cin >>: Takes input from the user.
   * cout <<: Prints the output to the console.
4. **Arithmetic Operation**:
   * sum = num1 + num2: Adds the two numbers.

**Output**

Enter the first number: 5

Enter the second number: 10

The sum of 5 and 10 is 15