**Task: Basic Arithmetic Operations in C++**

**Objective**: Create a simple C++ program to perform basic arithmetic operations (addition, multiplication, subtraction, and division) on two integers entered by the user.

**Instructions:**

1. **Variable Declaration**:
2. Declare two integer variables named a and b to store the user inputs.
3. **User Input**:
4. Prompt the user to enter the first integer and store it in variable a.
5. Prompt the user to enter the second integer and store it in variable b.
6. **Perform Arithmetic Operations**:
7. Calculate the sum of a and b, and display the result.
8. Calculate the product of a and b, and display the result.
9. Calculate the difference between a and b, and display the result.
10. Calculate the quotient of a divided by b, and display the result.
11. **Expected Output**:
12. The program should output the results of the arithmetic operations in a clear and user-friendly format.

**Example Code Structure:**

Follow the provided code structure to implement your program. Ensure you include necessary headers and use the correct namespaces.