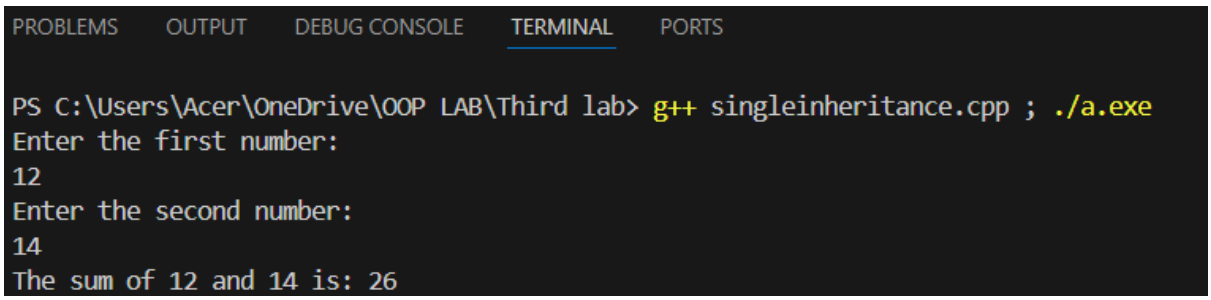
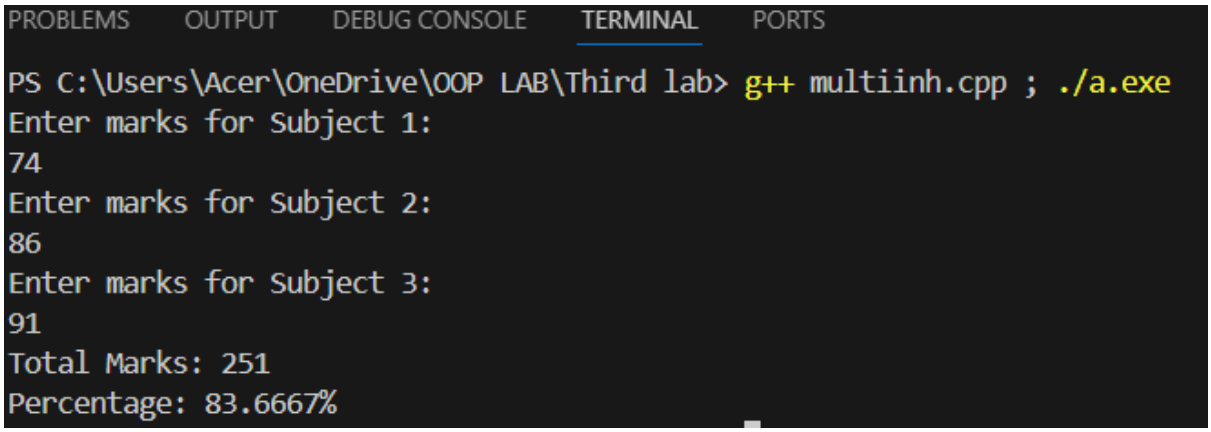
**Write a C++ program to add two numbers using single inheritance. Accept these two numbers from the user in base class and display the sum of these two numbers in derived class.**

## Output:


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Acer\OneDrive\OOP LAB\Third lab> g++ singleinheritance.cpp ; ./a.exe
Enter the first number:
12
Enter the second number:
14
The sum of 12 and 14 is: 26

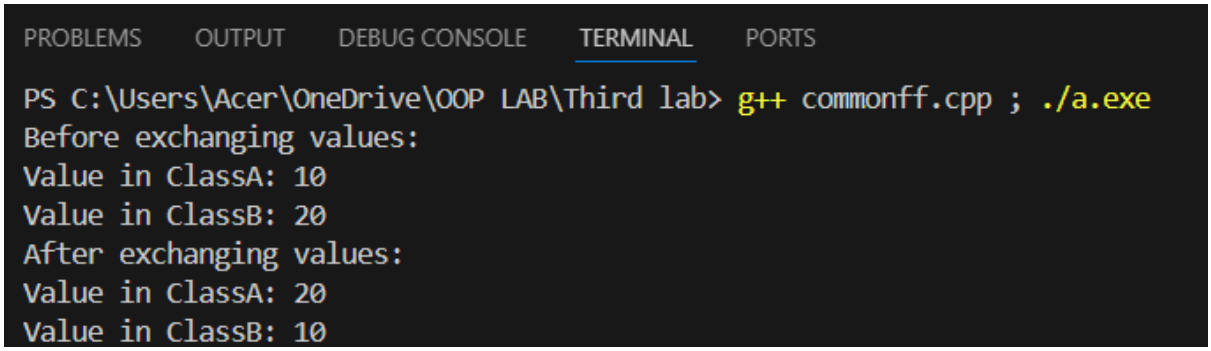
**Write a C++ program to calculate the percentage of a student using multi-level inheritance. Accept the marks of three subjects in base class. A class will derived from the above mentioned class which includes a function to find the total marks obtained and another class derived from this class which calculates and displays the percentage of student.**

**Output:**


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Acer\OneDrive\OOP LAB\Third lab> g++ multiinh.cpp ; ./a.exe
Enter marks for Subject 1:
74
Enter marks for Subject 2:
86
Enter marks for Subject 3:
91
Total Marks: 251
Percentage: 83.6667%

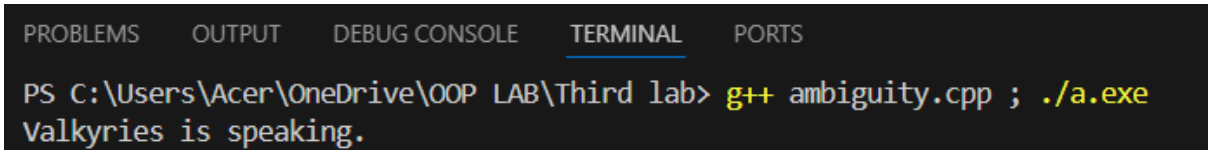
**Write a C++ program to demonstrate how a common friend function can be used to exchange the private values of two classes. (Use call by reference method).**

**Output:**


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Acer\OneDrive\OOP LAB\Third lab> g++ commonff.cpp ; ./a.exe
Before exchanging values:
Value in ClassA: 10
Value in ClassB: 20
After exchanging values:
Value in ClassA: 20
Value in ClassB: 10

**Write a program to demonstrate ambiguity in multiple inheritance. Also show the ways to solve it using an example.**

**Output:**


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
PS C:\Users\Acer\OneDrive\OOP LAB\Third lab> g++ ambiguity.cpp ; ./a.exe
Valkyries is speaking.