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//This programme explains the scope of variables by examples
#include <iostream>
using namespace std;

int count3{ 100 }; // global variable as it doesn't belong to any block

namespace mycount { // This is a namespace

    int count2{ 40 };
}

int main() {

    // This is a first scope
    int count1{ 10 }, count2{ 20 };
    int result1 = count1 + count2; // 30
    int result2 = count1 + count3; // 110
    {
        // This is a second scope
        int count1{ 40 }, count3{ 30 };
        int result3 = count1 + count2; // 60 (count2 is not defined in the scope, so the
compiler goes to a higher scope)
        int result4 = count2 + count3; // 50
        int result5 = count1 + ::count3; // 140 (the ::count3 refers to the global scope)
        int result6 = count1 + mycount::count2; // 80 (count2 is now taken from "mycount"
namespace)

        //Second scope ends here
    }
    int result7 = count1 + count3; // 110

    // first scope ends here

    system("pause");

}
```