12) Write a program to accept the student detail such as name and 3 different marks by get_data() method and display the name and average of marks using display() method. Define a friend class for calculating the average of marks using the method mark_avg().

```cpp
 #include <iostream>
#include <string>
// Forward declaration of AverageCalculator class
class AverageCalculator;
class Student {
private:
   std::string name;
   float marks[3];
public:
   // Function to get student details
   void get_data() {
      std::cout << "Enter student name: ";
      std::getline(std::cin, name);

      std::cout << "Enter marks for three subjects:\n";
      for (int i = 0; i < 3; ++i) {
         std::cout << "Subject " << i + 1 << ": ";
         std::cin >> marks[i];
      }
   }

   // Function to display student name and average marks
   void display();

   // Friend class declaration
   friend class AverageCalculator;
};

class AverageCalculator {
public:
   // Friend function to calculate the average of marks
   static float mark_avg(const Student& student);
};

// Definition of display() function
void Student::display() {
   std::cout << "Student Name: " << name << std::endl;
   std::cout << "Average Marks: " << AverageCalculator::mark_avg(*this) << std::endl;
}
```

```cpp
// Definition of mark_avg() function
float AverageCalculator::mark_avg(const Student& student) {
    float total = 0;
    for (int i = 0; i < 3; ++i) {
        total += student.marks[i];
    }
    return (total / 3.0);
}

int main() {
    // Create an object of the Student class
    Student student;

    // Get student details
    student.get_data();

    // Display student details and average marks
    student.display();

    return 0;
}
```