**friend Function in C++**

If a function is defined as a friend function then, the private and protected data of a class can be accessed using the [function](https://www.programiz.com/cpp-programming/function).

The complier knows a given function is a friend function by the use of the keyword **friend**.

A friend function of a class is defined outside that class' scope but it has the right to access all private and protected members of the class. Even though the prototypes for friend functions appear in the class definition, friends are not member functions.

#include<iostream>

using namespace std;

class student{

private:

int id=101;

public:

friend void m1( student);

};

void m1( student st){

cout<<st.id;

}

int main(){

student s;

m1(s);

return 0;

}

# **Friend class**

**Friend Class** A friend class can access private and protected members of other class in which it is declared as friend. It is sometimes useful to allow a particular class to access private members of other class.

#include<iostream>

using namespace std;

class student{

private:

int id=101;

public:

friend class A; // now class A can access private member of student

};

class A{

public:

void m1( student st){

cout<<st.id;

}

};

int main(){

student s;

A a;

a.m1(s);

return 0;

}

1. Friendship is not mutual. If a class A is friend of B, then B doesn’t become friend of A automatically.
2. Friendship is not inherited