**Content 37**

**Protected Access modifiers in C++**

In protected Derivation we cannot access private member but we can access public and protected members.

**Table for understanding the access modifiers:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Private Derivation. | 1. Public Derivation. | 1. Protected Derivation |
| 1. Private members | Not inherited | Not inherited | Not inherited |
| 1. Public members. | Private | Public | Protected |
| 1. Protected members. | Private | Public | Protected |

**Simple Code for explaination of protected Derivation and member:**

#include <iostream>

using namespace std;

class base

{

protected:

    int a;

public:

    int b;

};

class derive : protected base{   //here we had made a protected class.

};

int main()

{

    base b;

    derive d;

    cout<<d.a; //we can't do this thing because a is protected in both the classes.

    return 0;

}