

Some Examples about class

```
#include <iostream>
#include <string.h>
using namespace std;
class Student;
class Marks
{
    private:
        int rno;
        float perc;
    public:
        Marks() //constructor
        {rno = 0; perc = 0.0;}
        //input roll numbers and percentage
        void readMarks(void)
        {
            cout<<"Enter roll number: ";
            cin>>rno;
            cout<<"Enter percentage: ";
            cin>>perc;
        }
        void printMarks(void) //print roll number and percentage
        {
            cout<<"Roll No.: "<<rno<<endl;
            cout<<"Percentage: "<<perc<<"%"<<endl;
        }
};
class Student
{
    private:
        Marks objM; //object to Marks class
        char name[30];
    public:
        void readStudent(void) //input student details
        {
```

```

        //Input name
        cout<<"Enter name: ";
        cin.getline(name, 30);

        objM.readMarks();          //input Marks
    }
    void printStudent(void)        //print student details
    {
        //print name
        cout<<"Name: "<<name<<endl;
        //print marks
        objM.printMarks();
    }
} std ;
int main()                        //main code
{
    //create object to student class
    Student std;
    std.readStudent();
    std.printStudent();
    return 0;
}

```

```

class Date
{
private:
    int _month;
    int _day;
    int _year;
public:
    Date();
    Date(int month, int day, int year);
    ~Date();
    void setDate(int month, int day, int year);
    void displayDate();
};

class RobotBrain
{
    vector<char> brainData;
public:
    ~RobotBrain() { puts("Good bye cruel world"); }
    void process() { puts("Do some process"); }
};

class Robot
{

```

```
RobotBrain brain;  
public:  
void processInformation()  
{  
    brain.process();  
}
```

```
#include<iostream>  
using namespace std;  
class A {  
    public:  
    class B {  
        private:  
            int num;  
        public:  
            void getdata(int n) {  
                num = n;  
            }  
            void putdata() {  
                cout<<"The number is "<<num;  
            }  
        };  
};  
int main() {  
    cout<<"Nested classes in C++"<< endl;  
    A :: B obj;  
    obj.getdata(9);  
    obj.putdata();  
    return 0;  
}
```

```
class outside
{
public:
    class nested
    {
    public:
        static int x;
        static int y;
        int f();
        int g();
    };
};

Main()
{
int: outside:nested::x = 5;
int outside::nested::f() { return 0; };

typedef outside::nested outnest;          // define a typedef
int outnest::y = 10;                      // use typedef with ::
int outnest::g() { return 0; };
}
```