

```

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//Demo time: 8:57

#include<iostream>
#include <iomanip>
using namespace std;

class Student
{
    private:
        string name;
        int score;
        char grade;
    public:
        Student();
        Student(string nm, int sc);
        void print();
};

// Default constructor
Student::Student()
{
    name = "empty";
    score = 0;
    grade = '0';
}

// Parameter Constructor
Student::Student(string nm, int sc)
: name (nm), score (sc)
{
    name = nm;
    score = sc;
    //Determine the grade
    if(sc >= 90 && sc <= 100)
    {
        grade = 'A';
    } else if (sc >= 80 && sc <= 89)
    {
        grade = 'B';
    } else if (sc >= 70 && sc <= 79)
    {
        grade = 'C';
    } else if (sc >= 60 && sc <= 69)
    {
        grade = 'D';
    } else if (sc >= 0 && sc <= 59)
    {
        grade = 'F';
    }
}

// Print member function
void Student::print()
{
    cout << setw (6) << left << name;
    cout << setw (4) << right << score;
    cout << setw (4) << right << grade;
    cout << endl;
}

```

```
int main ()
{
    // Declaration of an array of using default constructors
    Student students [5];

    // Instantiation of five objects using parameter constructors
    students[0] = Student("Tom", 85);
    students[1] = Student("Alice", 71);
    students[2] = Student("Jack", 93);
    students[3] = Student("Mary", 65);
    students[4] = Student("Sue", 54);

    // Printing students name, score, and grade
    for(int i = 0; i < 5; i++)
    {
        students[i].print();
    }

    return 0;
}
```

Tom	85	B
Alice	71	C
Jack	93	A
Mary	65	D
Sue	54	F