//Joon Im

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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;

}

