Main.cpp

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#include "Student.h"

#include <iostream>

using namespace std;

int main() {

Student studentList[5] = {Student("Tom", 85), Student("Alice", 71),

Student("Jack", 93), Student("Mary", 65),

Student("Sue", 54)};

for (int i = 0; i < (sizeof(studentList) / sizeof(studentList[0])); i++)

studentList[i].print();

return 0;

}

Student.h

#ifndef STUDENT\_H

#define STUDENT\_H

#include <iostream>

#include <string>

using namespace std;

class Student {

// Private members

private:

string name;

int score;

char grade;

//Public members

public:

Student();

Student(string name, int score);

~Student();

void print();

};

#endif

Student.cpp

#include "Student.h"

#include <iomanip>

#include <iostream>

#include <string>

using namespace std;

// Default constructor this initializes the name, score, and grade

Student::Student() {

this->name = "None";

this->score = 0;

this->grade = 'F';

}

// Overloaded constructor that set specific name and score of the student

Student::Student(string name, int score) {

this->name = name;

this->score = score;

// studentGrade = [Grade/10]

char letterGrade[] = {'F', 'D', 'C', 'B', 'A'};

if (score >= 90) {

this->grade = letterGrade[4];

} else if (score >= 80) {

this->grade = letterGrade[3];

} else if (score >= 70) {

this->grade = letterGrade[2];

} else if (score >= 60) {

this->grade = letterGrade[1];

} else

this->grade = letterGrade[0];

}

// Destructor that deletes the object

Student::~Student() {}

// Print function that prints out the student's name, score, and letter grade

void Student::print() {

cout << left << setw(10) << name << right << setw(5) << score << setw(5)

<< grade << endl;

}

Output

A picture containing text, meter, device

Description automatically generated