Code

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#include <iostream>

using namespace std;

int \*InputGrades(int\* grade) {

cout << "Enter Quiz 1 Grade:" << endl;

cin >> grade[0];

cout << "Enter Quiz 2 Grade:" << endl;

cin >> grade[1];

cout << "Enter Quiz 3 Grade:" << endl;

cin >> grade[2];

cout << "Enter Homework 1 Grade:" << endl;

cin >> grade[3];

cout << "Enter Homework 2 Grade:" << endl;

cin >> grade[4];

cout << "Enter Homework 3 Grade:" << endl;

cin >> grade[5];

cout << "Enter Exam 1 Grade:" << endl;

cin >> grade[6];

cout << "Enter Exam 2 Grade:" << endl;

cin >> grade[7];

cout << "Enter Final Exam Grade:" << endl;

cin >> grade[8];

return grade;

}

double CalculateWeightedAverage(int\* grade) {

double quizAvg = (grade[0] + grade[1] + grade[2]) / 3 \* 0.25;

double hwAvg = (grade[3] + grade[4] + grade[5]) / 3 \* 0.2;

double exam1Avg = grade[6] \* 0.15;

double exam2Avg = grade[7] \* 0.15;

double finalAvg = grade[8] \* 0.15;

double attendance = 10;

double average = quizAvg + hwAvg + exam1Avg + exam2Avg + finalAvg + attendance;

return average;

}

char DetermineLetterGrade(int avg) {

if (avg >= 90) {

return 'A';

} else if (avg >= 80 && avg <= 89) {

return 'B';

} else if (avg >= 70 && avg <= 79) {

return 'C';

} else if (avg >= 60 && avg <= 69) {

return 'D';

} else if (avg < 60) {

return 'F';

}

}

void DisplayStudentResults(int avg, char grade) {

cout << "Grade Weighted Average is " << avg << endl;

cout << "Letter Grade: " << grade << endl;

}

int main()

{

bool test = true;

string tester;

while (test) {

int gradeBank[9];

int \*grade = InputGrades(gradeBank);

double avg = CalculateWeightedAverage(grade);

char letterGrade = DetermineLetterGrade(avg);

DisplayStudentResults(avg, letterGrade);

cout << "To calculate grades for another student type 'Next' to exit type 'Exit'" << endl;

cin >> tester;

if (tester == "Next") {

test = true;

} else if (tester == "Exit") {

test = false;

}

}

return 0;

}

Code Output Examples

Enter Quiz 1 Grade:

100

Enter Quiz 2 Grade:

100

Enter Quiz 3 Grade:

100

Enter Homework 1 Grade:

100

Enter Homework 2 Grade:

100

Enter Homework 3 Grade:

100

Enter Exam 1 Grade:

100

Enter Exam 2 Grade:

100

Enter Final Exam Grade:

100

Grade Weighted Average is 100

Letter Grade: A

To calculate grades for another student type 'Next' to exit type 'Exit'

Next

Enter Quiz 1 Grade:

100

Enter Quiz 2 Grade:

10

Enter Quiz 3 Grade:

10

Enter Homework 1 Grade:

10

Enter Homework 2 Grade:

10

Enter Homework 3 Grade:

10

Enter Exam 1 Grade:

10

Enter Exam 2 Grade:

100

Enter Final Exam Grade:

100

Grade Weighted Average is 53

Letter Grade: F

To calculate grades for another student type 'Next' to exit type 'Exit'

Exit

Process returned 0 (0x0) execution time : 29.938 s

Press any key to continue.

Enter Quiz 1 Grade:

97

Enter Quiz 2 Grade:

87

Enter Quiz 3 Grade:

77

Enter Homework 1 Grade:

67

Enter Homework 2 Grade:

57

Enter Homework 3 Grade:

80

Enter Exam 1 Grade:

90

Enter Exam 2 Grade:

100

Enter Final Exam Grade:

75

Grade Weighted Average is 85

Letter Grade: B

To calculate grades for another student type 'Next' to exit type 'Exit'

Exit

Process returned 0 (0x0) execution time : 22.649 s

Press any key to continue.

Enter Quiz 1 Grade:

60

Enter Quiz 2 Grade:

61

Enter Quiz 3 Grade:

62

Enter Homework 1 Grade:

63

Enter Homework 2 Grade:

64

Enter Homework 3 Grade:

65

Enter Exam 1 Grade:

66

Enter Exam 2 Grade:

67

Enter Final Exam Grade:

68

Grade Weighted Average is 68

Letter Grade: D

To calculate grades for another student type 'Next' to exit type 'Exit'