

Answer on question 50192

//write a c++ program which reads mid and final exam mark of 50 students including their name and ID and displays total mark of each student ,average mark,maximum mark,minimium mark,name of students with their marks and ID and grade?

```
#include <iostream>
#include <stdlib.h>
#include <fstream>
#include <math.h>
// #include "stdafx.h"
using namespace std;
int main()
{
// ID
ifstream IDinfo("ID.txt");
if (!IDinfo) { cout << "Cannot open file\n";}
int id[50];
for(int i=1; i<51; i++){
IDinfo >> id[i];
}
IDinfo.close();

// name
ifstream studentName("studentName.txt");
if (!studentName) { cout << "Cannot open file\n";}
char name[50][15];
for(int i=1; i<51; i++){
studentName >> name[i];
}
studentName.close();
//mid mark
ifstream mid("midExamMark.txt");
if (!mid) { cout << "Cannot open file\n";}
int midMark[50];
for(int i=1; i<51; i++){
mid >> midMark[i];
}
mid.close();
//cout<<midMark[13]<<endl;
//final exam mark
ifstream finalmark("finalExamMark.txt");
if (!finalmark) { cout << "Cannot open file\n";}
int finalMark[50];
for(int i=1; i<51; i++){
finalmark >> finalMark[i];
}
finalmark.close();
//cout<<finalMark[13]<<endl;

//total mark
cout<<"ID"<<" " <<"name"<<" " <<"totalMark"<<endl<<endl;
int totalMark[50];
int sum;
int average;
for(int i=1; i<51; i++){
```

```

totalMark[i] = finalMark[i]+midMark[i];
cout<<id[i]<<" "<<name[i]<<" "<<totalMark[i]<<endl;
}
int num_av = 0;
int num_min = 0;
int num_max = 0;
int min_av=100;
int totMinusAverage =0;
for(int i=1; i<51; i++){
//average mark
sum = sum + totalMark[i];
average = ceil(sum/50);
totMinusAverage = totalMark[i] - average;
if(min_av>totMinusAverage){num_av = i;min_av=totMinusAverage;}
}
cout<<"id = "<<num_av<<" , average ="<<average<<endl;
//max/min mark
int max,min;
max = totalMark[1];
min = totalMark[1];
for(int i=1; i<51; i++){
if (totalMark[i]>max){num_max=i;max = totalMark[i];}
if (totalMark[i]<min){num_min=i;min = totalMark[i];}
}
cout<<"min mark is: "<<min<<endl;
cout<<"max mark is: "<<max<<endl;
cout<<"average mark has student with ID: "<<num_av<<" , his name is "<<name[num_av]<<endl;
cout<<"max mark has student with ID: "<<num_max<<" , his name is "<<name[num_max]<<endl;
cout<<"min mark has student with ID: "<<num_min<<" , his name is "<<name[num_min]<<endl;
return 0;
}
// compiling on Linux:
// g++ question.cxx -o question
// ./question

```

ID.txt

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50

studentName.txt

Armandina

Wynona

Bev

Pamela

Hedwig

Inga

Zenaida

Luvenia

Harriette

Benjamin

Emmaline

Consuela

Antwan

Zada

Buster

Loreta

Bert

Michale

Magaret

Mee

Malia

Jenice

Broderick

Samatha  
Luigi  
Elisabeth  
Daniela  
Joannie  
Teresa  
Ida  
Stuart  
Nidia  
Williema  
Kerrie  
Lang  
Mollie  
German  
Edyth  
Calandra  
Micah  
Veola  
Lavinia  
Usha  
Melva  
Corliss  
Stephaine  
Gino  
Candra  
Estell  
Huong

MidExamMark.txt

67  
54  
20  
50  
84  
20  
2  
32  
31  
5  
4  
74  
83  
29  
2  
28  
18  
67  
80  
86  
69  
18  
6  
14  
82  
76

94  
64  
29  
33  
87  
43  
29  
67  
28  
98  
50  
68  
76  
3  
73  
15  
30  
51  
56  
82  
55  
82  
50  
8

finalExamMark.txt

20  
77  
88  
16  
2  
89  
59  
65  
86  
31  
1  
59  
45  
97  
95  
3  
65  
48  
2  
3  
19  
93  
60  
30  
68  
23  
56  
73

39  
54  
18  
54  
71  
59  
70  
20  
68  
97  
18  
28  
35  
6  
89  
43  
30  
10  
98  
87  
35  
41