HW2

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#include <iostream>
#include <cstring>
using namespace std;
struct student
{
	string name;
	int m_math;
	int m_chem;
	int m_phy;

};
void calculate_avg (int n,student students[]);
void bubble_sort(int n,student students[]);
void input_data(int len,student students[]);
int main()
{
	student students[10];
	int len=10;
   input_data(len,students);
   calculate_avg (len,students);
   bubble_sort(len,students);
   return 0;
}
void input_data(int len,student students[])
{
	cout<<"Please input the names and marks of 10 students"<<endl;
	for (int i=0;i<len;i++)
	{
		cout<<"Name "<<i+1<<" : ";
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                cin>>students[i].name;
                cout<<"["<<i+1 <<".1] "<<students[i].name<<"-Math marks: ";
                cin>>students[i].m_math;
                cout<<"["<<i+1<<".2] "<<students[i].name<<"-Chemistry marks: ";
                cin>>students[i].m_chem;
                cout<<"["<<i+1<<".3] "<<students[i].name<<"-Physics marks: ";
                cin>>students[i].m_phy;
                cout<<endl;
        }
}
void calculate_avg(int n,student students[])
{
        cout<<"\nThe combined average of the three courses for 10 studentss is as follows: \n";
        double a_math=0;
        for(int i=0;i<n;i++)
        {
                a_math=a_math+students[i].m_math;
        }
   cout<<"Math: "<<a_math/n<<endl;

   double a_chem=0;
        for(int i=0;i<n;i++)
        {
                a_chem=a_chem+students[i].m_chem;

        }
   cout<<"Chemistry: "<<a_chem/n<<endl;

   double a_phy=0;
        for(int i=0;i<n;i++)
        {
                a_phy=a_phy+students[i].m_phy;
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            }
    cout<<"Physics: "<<a_phy/n<<endl;

}
void bubble_sort(int n,student students[])
{

            string temp;
            double temp1,temp2,temp3;
            for(int i=0;i<n;i++)
    {
            for(int j=i+1;j<n;j++)
            {
       if(students[i].name>students[j].name)
       {
          temp=students[i].name;
          students[i].name=students[j].name;
          students[j].name=temp;

          temp1=students[i].m_math;
          students[i].m_math=students[j].m_math;
          students[j].m_math=temp1;

          temp2=students[i].m_chem;
          students[i].m_chem=students[j].m_chem;
          students[j].m_chem=temp2;

          temp3=students[i].m_phy;
          students[i].m_phy=students[j].m_phy;
          students[j].m_phy=temp3;
          }
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    }


  }
  cout<<"\nMarks sheet for spring 2021\n";
      for(int i=0;i<n;i++)
      {
            cout<<"["<<i+1<<"] "<<students[i].name<<": math("<<students[i].m_math<<")
chemistry("<<students[i].m_chem;
            cout<<") physics("<<students[i].m_phy<<") \n"<<endl;


      }


}
```