

Lời giải bài thực hành bổ sung 4

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// Ten file: contro.cpp
#include <string>
#include <iostream>
using namespace std;
struct Sinhvien
{
    string tensv;
    int masv;
    int* diem;
    ~Sinhvien(){
        delete diem;
    }
};

void khoitaoSv(Sinhvien* ptr,int n); // nguyen mau ham khoi tao
void hienthiSv(Sinhvien* ptr,int n); // nguyen mau ham hien thi
//***** Ham main *****//
int main ()
{
    Sinhvien* svPtr;
    int m,n;
    cout<<"Co tat ca bao nhieu sinh vien:";
    cin>>m;
    svPtr=new Sinhvien[m];
    cout<<"Co tat ca bao nhieu diem:";
    cin>>n;
    for (int i=0;i<m; i++)
    {
        khoitaoSv(&svPtr[i],n); // khoi tao doi tuong
    }
    cout<<"\nDanh sach cac sinh vien:\n";
    for (int i=0;i<m; i++)
    {
        hienthiSv(&svPtr[i],n); // hien thi doi tuong
    }
}
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    }
    delete [] svPtr;
    return 0;
} // ket thuc ham main
//-----Phan dinh nghia cac ham-----//
void khoitaoSv(Sinhvien* ptr,int n) // nguyen mau ham khoi tao
{
    cout<<"Nhap ten sinh vien:";
    cin.ignore();
    getline(cin,ptr->tensv);
    cout<<"Nhap ma sinh vien:";
    cin>>ptr->masv;

    ptr->diem=new int[n];
    cout<<"Nhap cac diem cua sinh vien:\n";
    for (int i=0;i<n;i++)
    {
        cout<<"Nhap mot diem:";
        cin>>ptr->diem[i];
    }
}

void hienthiSv(Sinhvien* ptr, int n) // nguyen mau ham hien thi
{
    cout<<"\nThong tin sinh vien\n";
    cout<<"Ten sinh vien:"<<ptr->tensv<<endl;
    cout<<"Ma sinh vien:"<<ptr->masv<<endl;
    cout<<"Cac diem cua sinh vien:\n";
    for (int i=0;i<n;i++)
        cout<<"Diem "<<i<<": "<<ptr->diem[i]<<endl;
}

```