

```

#include<iostream>
using namespace std;

struct student
{
    int code;
    char name[80];
    float grade1;
    float grade2;
    int flag;
};

struct employee{
    int id;
    char name[80];
    float salary;
    int flag;
};

struct department
{
    int flag;
    union
    {
        student s;
        employee e;
    }person;
};

struct Node {
    department info;
    Node *next;
};

int main(){
    char c;
    int flag;
    Node *list, *temp;
    cout<<"if you want to enter data enter y: "<<endl;
    cin>>c;
    if(c!='y'){
        cout<<"thanks"<<endl;
        exit(0);
    }
    list = new Node;

    cout<<"0 - for student "<<endl;
    cout<<"1- for employee"<<endl;
    cout<<"Enter your choice: ";

```

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cin>>flag;
switch (flag){
    case 0:
        cout<<"please Enter student code: ";
        cin>>list->info.person.s.code;
        cout<<"please Enter student name: ";
        cin>>list->info.person.s.name;
        cout<<"please Enter student first grade: ";
        cin>>list->info.person.s.grade1;
        cout<<"please Enter student second grade: ";
        cin>>list->info.person.s.grade2;
        list->next = NULL;
        list->info.flag=0;
        break;
    case 1:
        cout<<"Enter employee id: ";
        cin>>list->info.person.e.id;
        cout<<"Enter employee name: ";
        cin>>list->info.person.e.name;
        cout<<"Enter employee salary: ";
        cin>>list->info.person.e.salary;
        list->next = NULL;
        list->info.flag=1;

        break;

        default:
        cout << "Error Invalid!" << endl;
        break;
    }

    cout<<"if you want to enter data enter y: "<<endl;
    cin>>c;
    temp = list;

    while (c == 'y'){
        temp->next = new Node;
        temp = temp->next;
        cout<<"0 - for student "<<endl;
        cout<<"1- for employee"<<endl;
        cout<<"Enter your choice: ";
        cin>>flag;
        switch (flag)
        {
            case 0:
                cout<<"please Enter student code: ";

```

```

        cin>>temp->info.person.s.code;
        cout<<"please Enter student name: ";
        cin>>temp->info.person.s.name;
        cout<<"please Enter student first grade: ";
        cin>>temp->info.person.s.grade1;
        cout<<"please Enter student seconed grade: ";
        cin>>temp->info.person.s.grade2;
        temp->next = NULL;
        temp->info.flag = 0;
        break;
    case 1:
        cout<<"Enter employee id: ";
        cin>>temp->info.person.e.id;
        cout<<"Enter employee name: ";
        cin>>temp->info.person.e.name;
        cout<<"Enter employee salary: ";
        cin>>temp->info.person.e.salary;
        temp->next = NULL;
        temp->info.flag = 1;
        break;
    default:
        cout << "Error Invalid!" << endl;
        break;
    }
    cout << "If you want to Enter another info type y : ";
    cin >> c;
}

    cout<<endl<<"Displaying department Record: "<<endl;
    temp = list;
    while(temp!=NULL)
    {
        switch(temp->info.flag)
        {
            case 0:
                cout<<"stutent record : "<<endl;
                cout<<"Code : "<<temp->info.person.s.code<<endl;
                cout<<"Name : "<<temp->info.person.s.name<<endl;
                cout<<"F grade : "<<temp->info.person.s.grade1<<endl;
                cout<<"S grade : "<<temp->info.person.s.grade2<<endl;
                cout<<endl;
                break;
            case 1:
                cout<<"employee record : "<<endl;
                cout<<"id : "<<temp->info.person.e.id<<endl;
                cout<<"Name : "<<temp->info.person.e.name<<endl;

```

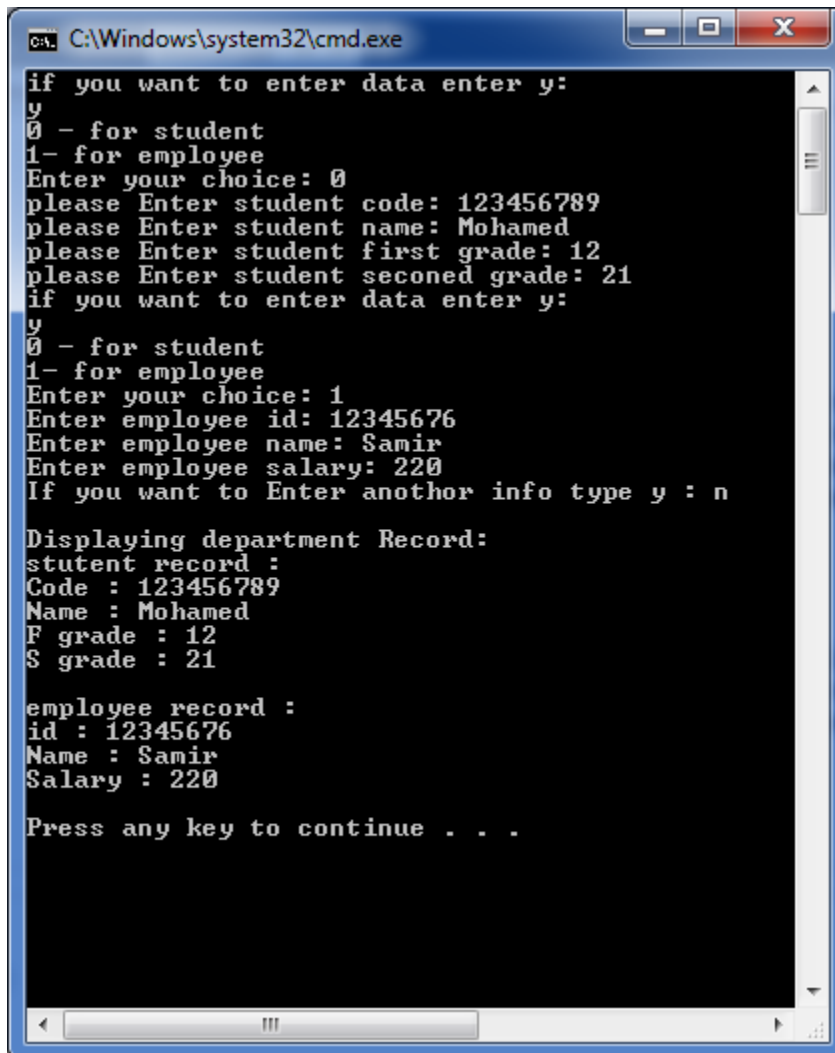
```

        cout<<"Salary : "<<temp->info.person.e.salary<<endl;
        cout<<endl;
        break;
    }
    temp = temp->next;
}

return 0;
}

```

----- **OutPut** -----



```

C:\Windows\system32\cmd.exe
if you want to enter data enter y:
y
0 - for student
1- for employee
Enter your choice: 0
please Enter student code: 123456789
please Enter student name: Mohamed
please Enter student first grade: 12
please Enter student seconed grade: 21
if you want to enter data enter y:
y
0 - for student
1- for employee
Enter your choice: 1
Enter employee id: 12345676
Enter employee name: Samir
Enter employee salary: 220
If you want to Enter anothor info type y : n

Displaying department Record:
stutent record :
Code : 123456789
Name : Mohamed
F grade : 12
S grade : 21

employee record :
id : 12345676
Name : Samir
Salary : 220

Press any key to continue . . .

```