#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;

bool flag;

department d;

Node \*list, \*temp;

cout<<"if you want to enter data enter y: "<<endl;

cin>>c;

if(c!='y'){

cout<<"thanks"<<endl;

exit(0);

}

list = NULL;

do {

cout<<"0 - for student "<<endl;

cout<<"1- for employee"<<endl;

cout<<"Enter your choice: ";

cin>>flag;

d.flag = flag;

switch (flag){

case 0:

cout<<"please Enter student code: ";

cin>>d.person.s.code;

cout<<"please Enter student name: ";

cin>>d.person.s.name;

cout<<"please Enter student first grade: ";

cin>>d.person.s.grade1;

cout<<"please Enter student seconed grade: ";

cin>>d.person.s.grade2;

break;

case 1:

cout<<"Enter employee id: ";

cin>>d.person.e.id;

cout<<"Enter employee name: ";

cin>>d.person.e.name;

cout<<"Enter employee salary: ";

cin>>d.person.e.salary;

break;

default:

cout<<"Error"<<endl;

cout<<"press any key to exit"<<endl;

cin.get();

return 1;

break;

}

if (!list) {

list = new Node;

list->info = d;

list->next = NULL;

temp = list;

} else {

temp->next = new Node;

temp = temp->next;

temp->info = d;

temp->next = NULL;

}

cout<<"if you want to enter data enter y: "<<endl;

cin>>c;

} while(c=='y');

cout<<endl<<"Displaying department Record: "<<endl;

while(list)

{

switch(d.flag)

{

case 0:

cout<<"stutent record"<<endl;

cout<<"Code"<<d.person.s.code<<endl;

cout<<"Name"<<d.person.s.name<<endl;

cout<<"F grade"<<d.person.s.grade1<<endl;

cout<<"S grade"<<d.person.s.grade2<<endl;

cout<<endl;

break;

case 1:

cout<<"employee record"<<endl;

cout<<"id"<<d.person.e.id<<endl;

cout<<"Name"<<d.person.e.name<<endl;

cout<<"Salary"<<d.person.e.salary<<endl;

cout<<endl;

break;

}

list = list->next;

}

return 0;

}

