

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

/*
 * File:   Employee.h
 * Author: alexliu
 *
 * Created on January 12, 2017, 11:40 PM
 */

#ifndef EMPLOYEE_H
#define EMPLOYEE_H

class Employee{
protected:
    string m_FirstName;
    string m_LastName;
    string m_DepartmentName;
    unsigned short m_HiringYear;

public:
    Employee(const string& firstName, const string& lastName, const string& departmentName,
const unsigned short hireYear){
        m_FirstName = firstName;
        m_LastName = lastName;
        m_DepartmentName = departmentName;
        m_HiringYear = hireYear;
    }

    string getFirstName() const{
        return m_FirstName;
    }
}
```

```
string getLastName() const{
    return m_LastName;
}

string getDepartmentName() const{
    return m_DepartmentName;
}

unsigned short getHiringYear() const{
    return m_HiringYear;
}

void setFirstName(const string& firstName){
    m_FirstName = firstName;
}

void setLastName(const string& lastName){
    m_LastName =  lastName;
}

void setDepartmentName(const string& departmentName){
    m_DepartmentName = departmentName;
}

void setHiringYear(const unsigned short hiringYear){
    m_HiringYear = hiringYear;
}
};

#endif /* EMPLOYEE_H */
```

```
#include <cstdlib>
#include <iostream>
using namespace std;
#include "Employee.h"
#define BUFFERSIZE 100

using namespace std;

void printBufferSize(unsigned int buffersize) {
    cout<<buffersize<<endl;
}

void printBufferSizePointer(const unsigned int* bufferSizePtr) {
    cout<<*bufferSizePtr<<endl;
}

bool hireEarlier(const Employee& emp1, const Employee& emp2) {
    return emp1.getHiringYear() < emp2.getHiringYear();
}

int main(int argc, char** argv) {
    const unsigned int buffersize=100;
    printBufferSizePointer(&buffersize);

    const Employee JohnSmith("John", "Smith", "Sales", 2010);
    const Employee AliceDoe("Alice", "Doe", "Sales", 2016);

    cout<<hireEarlier(JohnSmith, AliceDoe)<<endl;

    cout<<JohnSmith.getFirstName()<<endl;

    return 0;
}
```