

Faysal Khatri
CSC220 -- Activity 9
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Sample Output

Employee 3:

 Name: John Franklin
 Address: 222 Bank
 Phone: 480-555-2343
Current pay : 3000

Employee 4:

 Name: Faysal Contractor1
 Address: 222 Contractor
 Phone: 480-555-9999
Current pay : 2000

Employee 5:

 Name: Faysal Contractor2
 Address: 222 Contractor
 Phone: 480-555-9999
Exceeded max hours. Only max hours will be recorded
Current pay : 2000

Employee 6:

 Name: Faysal Contractor3
 Address: 222 Contractor
 Phone: 480-555-9999
Current pay : 4700

Employee 7:

 Name: Faysal Contractor4
 Address: 222 Contractor
 Phone: 480-555-9999
Exceeded max hours. Only max hours will be recorded
Current pay : 3500

Total payroll: 17523
Done!

contractor.hpp

```
// Staff member - base class

#include<iostream>
#include "hourly.hpp"

class Contractor : public Hourly {
private:
    int maxHours = 40;

public:
    Contractor(std::string n, std::string a, std::string p, std::string s, int r, int h,
int m) : Hourly(n, a, p, s, r, h)
    {
        maxHours = m;
    }

    Contractor(std::string n, std::string a, std::string p, std::string s, int r, int
h) : Hourly(n, a, p, s, r, h)
    {
        maxHours = 40;
    }

    int pay();
    void setMaxHours(int m);
};
```

contractor.cpp

```
#include "contractor.hpp"

int Contractor::pay() {
    int pay = 0;

    if (hours > maxHours) {
        std::cout << "Exceeded max hours. Only max hours will be recorded\n";
        hours = maxHours;
    }

    if ( hours > 40 ) {
        pay = payrate * 40;
        pay += (payrate * 1.5) * (hours - 40);
    }
    else {
        pay = payrate * hours;
    }

    return (pay);
}

void Contractor::setMaxHours(int m) {
    maxHours = m;
}
```

staff.cpp

```
// Adapted from an example from Java Foundations
// by John Lewis, Peter DePasquale, & Joe Chase
//
#include<iostream>
#include"staffmember.hpp"
#include"salaried.hpp"
#include"volunteer.hpp"
#include"hourly.hpp"
#include"contractor.hpp"

using namespace std;

#define STAFF_SIZE 8

void print_paystub(StaffMember * s) {
    s->print();
    cout << "Current pay : " << s->pay() << endl;
}

int main() {
    int ii;
    int totalpay = 0;
    Salaried * emp1 = new Salaried("Bob Smith", "123 Main", "480-555-8765",
                                   "111-22-3333", 50000);

    Volunteer * emp2 =
        new Volunteer("Alice Jenkins", "456 4th", "480-555-2341");
    Hourly * emp3 =
        new Hourly("Mitch Jenkins", "456 4th", "480-555-2341",
                  "222-33-2222", 10, 40);

    StaffMember * staff[STAFF_SIZE];
    staff[0] = emp1;
    staff[1] = emp2;
    staff[2] = emp3;
    staff[3] = new Salaried("John Franklin", "222 Bank", "480-555-2343", "111-22-4444",
                           78000);
    staff[4] = new Contractor("Faysal Contractor1", "222 Contractor", "480-555-9999", "111-
22-1111", 50, 40);
    staff[5] = new Contractor("Faysal Contractor2", "222 Contractor", "480-555-9999", "111-
22-1111", 50, 70);
    staff[6] = new Contractor("Faysal Contractor3", "222 Contractor", "480-555-9999", "111-
22-1111", 50, 76, 80);
    staff[7] = new Contractor("Faysal Contractor4", "222 Contractor", "480-555-9999", "111-
22-1111", 50, 90, 60);

    for(ii=0;ii<STAFF_SIZE;ii++) {
        cout <<"\nEmployee " << ii << ": " << endl;
        print_paystub(staff[ii]);
        totalpay=totalpay + staff[ii]->pay();
    }

    cout << "\nTotal payroll: " << totalpay << endl;
    cout << "Done!" << endl;

    return 0;
}
```