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ASSIGNMENT 1

EMPLOYEE HIERACHY:

Write a class named Commission with the following features:

It inherits the Hourly class.

It has two data members (in addition to those inherited):

- One is the total sales the employee has made (type double) and,
- The second is the commission rate for the employee (the commission rate will be type double and will represent the percent (in decimal form) commission the employee earns on sales (so .2 would mean the employee earns 20% commission on sales)).
- The constructor takes 6 parameters: the first 5 are the same as for Hourly (name, address, phone number, social security number, hourly pay rate) and the 6th is the commission rate for the employee.
- The constructor should call the constructor of the parent class with the first 5 parameters then use the 6th to set the commission rate.
- One additional member function is needed: public void addSales (double totalSales) that adds the parameter to the instance variable representing total sales.
- The pay method must call the pay method of the parent class to compute the pay for hours worked then add to that the pay from commission on sales.
- The total sales should be set back to 0
- Note: you don't need to set the hoursWorked back to 0. □ A print function needs to be overridden.

MAIN PROGRAM:

- Create two commissioned employees.
- Make up your own names, addresses, phone numbers and social security numbers.
- Have one of the employees earn \$6.25 per hour and 20% commission.
- The other one earn \$9.75 per hour and 15% commission.
- For the first employee you added, put the hours worked at 35 and the total sales \$400; for the second, put the hours at 40 and the sales at \$950.

CODE:

```
#include<iostream>
using namespace std;
class Hourly{
    protected:
        string name;
        string address;
        int phone_number;
        int social_number;
        double hourly_rate;

    public:
        Hourly(string name,string address,int phone_number, int social_number,double hourly_rate){
            this->name = name;
            this->address = address;
            this->phone_number = phone_number;
            this->social_number = social_number;
            this->hourly_rate = hourly_rate;
        }

        double pay_per_hour(int hour){
            double x;
            x= (hourly_rate * hour);
            return x;
        }

        void print(){
            cout<<"Name of the employee:"<<name<<endl;
            cout<<"Address of the employee:"<<address<<endl;
            cout<<"Phone number:"<<phone_number<<endl;
            cout<<"social number:"<<social_number<<endl;
            cout<<"hourly rate: $"<<hourly_rate<<endl;
        }
};

class Commission : public Hourly{
    private:
        double totalsales;
        double commission_rate;

    public:
        Commission(string name,string address,int phone_number, int social_number,double
hourly_rate,double com) :Hourly(name,address,phone_number,social_number,hourly_rate){
            commission_rate=com;
        }
};
```

```

        totalsales = 0;
    }

    void addsales( double ts){
        totalsales =totalsales + ts;
    }

    double com_r(){
        double y;
        y = (totalsales/100)*commission_rate;
        return y;
    }
    void print(){
        Hourly::print();
        cout<<"Total sales: $"<<totalsales<<endl;
    }
};

int main()
{
    Commission c1("Drake","Block A-65 House-6",555678,867956345,6.25,20),c2("David", "Block C-35
House-6", 5555654,890906853,9.75,15);

    c1.addsales(400);
    c2.addsales(950);
    cout<<"Employee 1:"<<endl;
    c1.print();

    double payrate = c1.pay_per_hour(35.0);
    int commissiondata= c1.com_r();
    double totalpay = payrate + commissiondata;
    cout<<"Total pay of employee: $"<<totalpay<<endl;
    cout<<"-----"<<endl;
    cout<<"Employee 2:"<<endl;
    c2.print();
    double payrate2 = c2.pay_per_hour(40.0);
    int commissiondata2=c2.com_r();
    double totalpay2 = payrate2+commissiondata2;
    cout<<"Total pay of employee: $"<<totalpay2<<endl;
}

```

CODE PIC:

```
Employee 1:
Name of the employee:Drake
Address of the employee:Block A-65 House-6
Phone number:555678
social number:867956345
hourly rate: $6.25
Total sales: $488
Total pay of employee: $298.75
-----
Employee 2:
Name of the employee:David
Address of the employee:Block C-35 House-6
Phone number:555654
social number:890906853
hourly rate: $9.75
Total sales: $958
Total pay of employee: $532
-----
Process exited after 0.04216 seconds with return value 0
Press any key to continue . . .
```