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# PROGRAMMING ADVICES

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```
#include <iostream>

using namespace std;

class clsPerson
{
private:
    int _ID;
    string _FirstName;
    string _LastName;
    string _Email;
    string _Phone;

public:
    //we put the default constructor here temporarily because
    inheritance will use it,
    //in the coming lectures we will solve the parameterized
    constructor with inheritance.
    clsPerson()
    {

    }

    clsPerson(int ID, string FirstName, string LastName, string
    Email, string Phone)
    {
        _ID = ID;
        _FirstName = FirstName;
        _LastName = LastName;
        _Email = Email;
        _Phone = Phone;
    }

    //Read Only Property
    int ID()
    {
        return _ID;
    }
}
```



```
//Property Set
void setFirstName(string FirstName)
{
    _FirstName = FirstName;
}

//Property Get
string FirstName()
{
    return _FirstName;
}

//Property Set
void setLastName(string LastName)
{
    _LastName = LastName;
}

//Property Get
string LastName()
{
    return _LastName;
}

//Property Set
void setEmail(string Email)
{
    _Email = Email;
}

//Property Get
string Email()
{
    return _Email;
}

//Property Set
void setPhone(string Phone)
{
    _Phone = Phone;
}

//Property Get
string Phone()
{
    return _Phone;
}
```



## Inheritance Part I

```
string FullName()
{
    return _FirstName + " " + _LastName;
}

void Print()
{
    cout << "\nInfo:";
    cout << "\n-----";
    cout << "\nID      : " << _ID;
    cout << "\nFirstName: " << _FirstName;
    cout << "\nLastName : " << _LastName;
    cout << "\nFull Name: " << FullName();
    cout << "\nEmail   : " << _Email;
    cout << "\nPhone   : " << _Phone;
    cout << "\n-----\n";
}

void SendEmail(string Subject, string Body)
{
    cout << "\nThe following message sent successfully to
email: " << _Email;
    cout << "\nSubject: " << Subject;
    cout << "\nBody: " << Body << endl;
}

void SendSMS(string TextMessage)
{
    cout << "\nThe following SMS sent successfully to phone: "
<<_Phone;
    cout << "\n" << TextMessage<<endl;
}

};
```



```
class clsEmployee : public clsPerson
{
private:
    string _Title;
    string _Department;
    float _Salary;

public:

    //Property Set
    void setTitle(string Title)
    {
        _Title = Title;
    }

    //Property Get
    string Title()
    {
        return _Title;
    }

    //Property Set
    void setDepartment(string Department)
    {
        _Department = Department;
    }

    //Property Get
    string Department()
    {
        return _Department;
    }

    //Property Set
    void setSalary(float Salary)
    {
        _Salary = Salary;
    }

    //Property Get
    float Salary()
    {
        return _Salary;
    }
};
```



```
int main()
{
    clsEmployee Employee1;

    Employee1.setFirstName("Mohammed");
    Employee1.setLastName("Abu-Hadhoud");
    Employee1.setEmail("a@a.com");
    Employee1.Print();
    Employee1.SendEmail("Hi", "How are you?");

    Employee1.setSalary(5000);

    cout << "Salary is: " << Employee1.Salary();

    //Calling the print will not print anything from derived class,
    only base class
    //therefore the print method will not serve me here, this is a
    problem will be solved in the next lecture.
    Employee1.Print();

    system("pause>0");
    return 0;
}
```