(1)데스크 램프를 만들자

```
#include <iostream>
using namespace std;

const int ON=1;
const int OFF=2;

class DeskLamp{
private:
        int state;
public:
        void DeskLamp::TurnOn(){
                state=ON;
        }
        void DeskLamp::TurnOff(){
                state=OFF;
        }
        void DeskLamp::ShowState()
        {
                cout<<"현재 문의 상태:";
                cout<<(state==ON? "ON": "OFF")<<endl;
        }
};

int main()
{
        DeskLamp dl;
        dl.TurnOn();
        dl.ShowState();

        dl.TurnOff();
        dl.ShowState();
        return 0;
}
```

(2) 은행 계좌 클래스를 정의하여라.

```
#include<iostream>
using namespace std;

class BankAccount{
private:
public:
        int accountNumber;
        char owner[20];
        int balance;

        void deposit(int money){
                balance += money;
        }
        void withdraw(int money){
                balance -= money;
        }
};

int main()
{
        BankAccount ba={1,"조교", 0};
        ba.deposit(100);
        cout<<ba.balance<<endl;
        ba.withdraw(100);
        cout<<ba.balance<<endl;
}
```

(3) 날짜를 클래스로 정의하라.

```
#include<iostream>
using namespace std;

class Date{
private:
        int year;
        int month;
        int day;

public:
        void Print()
        {
                cout<<"year:"<<year<<" month:"<<month<<" month:"<<day<<endl;
        }
        void SetData(Date &d, int val0, int val1, int val2)
        {
                d.year=val0;
                d.month=val1;
                d.day=val2;
        }
};

int main()
{
        Date d;
        int dump[3];
        cout<<"years month day ";
        cin>>dump[0]>>dump[1]>>dump[2];
        d.SetData(d, dump[0], dump[1], dump[2]);
        d.Print();

        return 0;
}
```

(4) 마트에서 판매되는 상품을 클래스로 정의하여라.

```
#include <iostream>
#include <string>
using namespace std;

class Product{
private:
        int id;
        string name;
        int price;
public:
        void input()
        {
                cout<<"상품의 일련번호: ";
                cin >> id;
                cout<<"상품의 이름: ";
                cin >> name;
                cout<<"상품의 가격: ";
                cin >> price;
        }
        void output(){
                cout<< "상품번호 " << id << endl;
                cout<< "상품의 이름 " << name << endl;
                cout<< "상품의 가격 " << price << endl;
        }
        bool isCheaper(Product other){
                return (price>other.price? true: false);
        }
};
int main()
{
        Product pr[3];
        for(int i=0;i<3;i++)
                pr[i].input();
        for(int i=0;i<3;i++)
                pr[i].output();

        if(pr[1]. isCheaper(pr[2]) ){
                pr[1].output();
                cout << "이 더 쌉니다 "<< endl;
        }
        else{
                pr[2].output();
                cout << "이 더 쌉니다 "<< endl;
        }
        return 0;
}
```