

```

#include <iostream>
#include <vector>

class Observer {
public:
    virtual void update()=0;
};

class Subject {

    std::vector<Observer*> observers;

public:

    void registerObserver(Observer* observer) {
        observers.push_back(observer);
    }
    void removeObserver(Observer* observer) {
        for ( auto it = observers.begin(); it!= observers.end(); ++it ) {
            if ( *it == observer ) {
                observers.erase(it);
                break;
            }
        }
    }
    void notifyObserver() const {
        for ( auto &observer : observers ) { observer ->update(); }
    }
};

```