#include<iostream>

#include<chrono>

#include<thread>

using namespace std;

enum trafficlight {RED ,GREEN};

// enum = define the data type ;

class trafficsignal{

    private:

    trafficlight currentlight;

public:

trafficsignal() : currentlight(RED){}

void switchlight(){

    if(currentlight == RED)

    currentlight = GREEN;

    else

    currentlight =RED;

    }

    trafficlight getcurrentlight() const{

        return currentlight;

        }

        };

class intersection{

    private:

    trafficsignal signal;

    public:

    void simulate(){

    while(true){

        cout<<"traffic light is"<<endl;

        if(signal.getcurrentlight() == RED)

        cout<<"RED"<<endl;

        else

        cout<<"GREEN"<<endl;

        signal.switchlight();

        this\_thread::sleep\_for(chrono::seconds(5));

    }

    }

};

int main(){

    intersection intersection;

    intersection.simulate();

    return 0;

}