#include <iostream>

#include <ostream>

#include <vector>

using namespace std;

class Road {

public:

 double length(); // km

 int speed(); // km per hour

};

class Car {

    public:

    virtual double getFuelConsumption(int velocity) const = 0;

};

double getPetrol(std::vector<Road> roads, const Car& car) {

    double total\_consumption = 0;

    std::vector<Road>::iterator it = roads.begin(); // creats iterator of the vector roads

    for (it; it!=roads.end(); it++) {

        double road\_len = (\*it).length();

        double road\_consumption\_per\_liter = car.getFuelConsumption((\*it).speed());

        total\_consumption += road\_len \* road\_consumption\_per\_liter;

    }

    return total\_consumption;

}