# **Problem 3 - Need for Speed III**

Problem for exam preparation for the Programming Fundamentals Course @SoftUni. Submit your solutions in the SoftUni judge system at <a href="https://judge.softuni.org/Contests/Practice/Index/2307#2">https://judge.softuni.org/Contests/Practice/Index/2307#2</a>.

You have just bought the latest and greatest computer game - Need for Seed III. Pick your favorite cars and drive them all you want! We know that you can't wait to start playing.

On the first line of the standard input, you will receive an integer n – the number of cars that you can obtain. On the next n lines, the cars themselves will follow with their mileage and fuel available, separated by " | " in the following format:

### "{car}|{mileage}|{fuel}"

Then, you will be receiving different commands, each on a new line, separated by ": ", until the "Stop" command is given:

- "Drive : {car} : {distance} : {fuel}":
  - You need to drive the given distance, and you will need the given fuel to do that. If the car doesn't have enough fuel, print: "Not enough fuel to make that ride"
  - If the car has the required fuel available in the tank, increase its mileage with the given distance, decrease its fuel with the given fuel, and print:
    - "{car} driven for {distance} kilometers. {fuel} liters of fuel consumed."
  - You like driving new cars only, so if a car's mileage reaches 100 000 km, remove it from the collection(s) and print: "Time to sell the {car}!"
- "Refuel : {car} : {fuel}":
  - o **Refill** the tank of your car.
  - o Each tank can hold a maximum of 75 liters of fuel, so if the given amount of fuel is more than you can fit in the tank, take only what is required to fill it up.
  - Print a message in the following format: "{car} refueled with {fuel} liters"
- "Revert : {car} : {kilometers}":
  - Decrease the mileage of the given car with the given kilometers and print the kilometers you have decreased it with in the following format:
    - "{car} mileage decreased by {amount reverted} kilometers"
  - If the mileage becomes less than 10 000km after it is decreased, just set it to 10 000km and DO NOT print anything.

Upon receiving the "Stop" command, you need to print all cars in your possession in the following format:

```
"{car} -> Mileage: {mileage} kms, Fuel in the tank: {fuel} lt."
```

## **Input/Constraints**

- The mileage and fuel of the cars will be valid, 32-bit integers, and will never be negative.
- The **fuel** and **distance** amounts **in the commands will never be negative**.
- The car names in the commands will always be valid cars in your possession.

### Output

All the output messages with the appropriate formats are described in the problem description.



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## **Examples**

Input	Output
3	Audi A6 driven for 543 kilometers. 47
Audi A6 38000 62	liters of fuel consumed.
Mercedes CLS 11000 35	Mercedes CLS driven for 94 kilometers.
   Volkswagen Passat CC 45678 5	11 liters of fuel consumed.
Drive : Audi A6 : 543 : 47	Not enough fuel to make that ride
Drive : Mercedes CLS : 94 : 11	Audi A6 refueled with 50 liters
Drive : Volkswagen Passat CC : 69 : 8	Mercedes CLS mileage decreased by 500
Refuel : Audi A6 : 50	kilometers
Revert : Mercedes CLS : 500	Audi A6 -> Mileage: 10000 kms, Fuel in
	the tank: 65 lt.
Revert : Audi A6 : 30000	Mercedes CLS -> Mileage: 10594 kms,
Stop	Fuel in the tank: 24 lt.
	Volkswagen Passat CC -> Mileage: 45678
	kms, Fuel in the tank: 5 lt.

#### Comments

After we receive the cars with their mileage and fuel, we start driving them. When we get to "Drive: Volkswagen Passat CC: 69:8" command, our program calculates that there is not enough fuel, and we print the appropriate message. Then we refuel the Audi A6 with 50 l of fuel and Revert the Mercedes with 500 kilometers.

When we receive the "Revert: Audi A6: 30000", we set its mileage to 10000 km, because if the current mileage of the Audi is 38543 kms and if we subtract 30000 from it, we receive 8543 kms, which is less than 10000 kms.

After all the commands, we print our current collection of cars with their current mileage and current fuel.

Input	Output

















4 Lamborghini Veneno | 11111 | 74 Bugatti Veyron | 12345 | 67 Koenigsegg CCXR 67890 12 Aston Martin Valkryie | 99900 | 50 Drive: Koenigsegg CCXR: 382: 82 Drive : Aston Martin Valkryie : 99 : 23 Drive : Aston Martin Valkryie : 2 : 1 Refuel : Lamborghini Veneno : 40 Revert : Bugatti Veyron : 2000 Stop

Not enough fuel to make that ride Aston Martin Valkryie driven for 99 kilometers. 23 liters of fuel consumed.

Aston Martin Valkryie driven for 2 kilometers. 1 liters of fuel consumed.

Time to sell the Aston Martin Valkryie!

Lamborghini Veneno refueled with 1 liters

Bugatti Veyron mileage decreased by 2000 kilometers

Lamborghini Veneno -> Mileage: 11111 kms, Fuel in the tank: 75 lt.

Bugatti Veyron -> Mileage: 10345 kms,

Fuel in the tank: 67 lt.

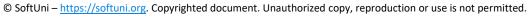
Koenigsegg CCXR -> Mileage: 67890 kms,

Fuel in the tank: 12 lt.

## **JS Examples**

Input	Output
[	Audi A6 driven for 543 kilometers.
'3',	47 liters of fuel consumed.
'Audi A6 38000 62',	Mercedes CLS driven for 94
'Mercedes CLS 11000 35',	kilometers. 11 liters of fuel
·	consumed.
'Volkswagen Passat CC 45678 5',	Not enough fuel to make that ride
'Drive : Audi A6 : 543 : 47',	Audi A6 refueled with 50 liters
'Drive : Mercedes CLS : 94 : 11',	
'Drive : Volkswagen Passat CC : 69 : 8',	Mercedes CLS mileage decreased by
'Refuel : Audi A6 : 50',	500 kilometers
•	Audi A6 -> Mileage: 10000 kms, Fuel
'Revert : Mercedes CLS : 500',	in the tank: 65 lt.
'Revert : Audi A6 : 30000',	Mercedes CLS -> Mileage: 10594 kms,
'Stop'	Fuel in the tank: 24 lt.



















] Volkswagen Passat CC -> Mileage: 45678 kms, Fuel in the tank: 5 lt.

#### **Comments**

After we receive the cars with their mileage and fuel, we start driving them. When we get to "Drive: Volkswagen Passat CC: 69:8" command, our program calculates that there is not enough fuel,0 and we print the appropriate message. Then we refuel the Audi A6 with 50 l of fuel and Revert the Mercedes with 500 kilometers.

When we receive the "Revert: Audi A6: 30000", we set its mileage to 10000 km, because if the current mileage of the Audi is 38543 kms and if we subtract 30000 from it, we receive 8543 kms, which is less than 10000 kms.

After all the commands, we print our current collection of cars with their current mileage and current fuel.

Input	Output
[	Not enough fuel to make that ride
'4',  'Lamborghini Veneno 11111 74',  'Bugatti Veyron 12345 67',  'Koenigsegg CCXR 67890 12',  'Aston Martin Valkryie 99900 50',  'Drive: Koenigsegg CCXR: 382: 82',  'Drive: Aston Martin Valkryie: 99: 23',  'Drive: Aston Martin Valkryie: 2: 1',	Aston Martin Valkryie driven for 99 kilometers. 23 liters of fuel consumed.  Aston Martin Valkryie driven for 2 kilometers. 1 liters of fuel consumed.  Time to sell the Aston Martin Valkryie!  Lamborghini Veneno refueled with 1
<pre>'Refuel : Lamborghini Veneno : 40', 'Revert : Bugatti Veyron : 2000', 'Stop' ]</pre>	liters  Bugatti Veyron mileage decreased by 2000 kilometers  Lamborghini Veneno -> Mileage: 11111 kms, Fuel in the tank: 75 lt.  Bugatti Veyron -> Mileage: 10345 kms, Fuel in the tank: 67 lt.  Koenigsegg CCXR -> Mileage: 67890 kms, Fuel in the tank: 12 lt.













