Problem 3. Parking

Exam problems for the "JavaScript Advanced" course @ SoftUni. Submit your solutions in the SoftUni Judge system at https://judge.softuni.bg/Contests/Compete/Index/2590#2

Write a **`class Parking`**, which implements the following functionality:

Functionality

constructor (capacity)

Should have these **2** properties:

- **`capacity`** – **number**;
- **`vehicles`** – **array**;

`Hint:` You can add more properties to help you finish the task.

addCar(carModel, carNumber)

The **`carModel`** and **`carNumber`** are of type **string**.

- If there's **not enough parking spots** for the car the park, **throw an Error**:

```
"Not enough parking space."
```

- Otherwise this function should **add** the car, with the properties: **carModel**, **carNumber**, **payed**: **default false**, to the vehicles array and **return:**

"The {carModel}, with a registration number {carNumber}, parked."

removeCar(carNumber)

- If the car is not found, throw an Error:

```
"The car, you're looking for, is not found."
```

- If the car hasn't payed, throw an Error:

```
"{carNumber} needs to pay before leaving the parking lot."
```

- Otherwise, this function should **remove** the car from the vehicles array and **return:**

"{carNumber} left the parking lot."

pay(carNumber)

- If the car is not found, throw an Error:

```
"{carNumber} is not in the parking lot."
```

- If the car has already payed, throw an Error:

  "{carNumber}'s driver has already payed his ticket."

- Otherwise, this function set payed to true on the found car and **return:**

  "{carNumber}'s driver successfully payed for his stay."

getStatistics(carNumber)

This **method** can be called **with one parameter** or **without** any.

If **NO** parameter is provided, the method should **return** the full information of the parking lot.

- At the first line:

  "The Parking Lot has { emptySlots } empty spots left."

- On the lines, display information about each vehicle**, sorted alphabetically ascending** by their **carModel:**

  "{carModel} == {carNumber} - {Has payed / Not payed}"

If the method is called with **parameter** for **carNumber**:

- **return only** the **information about the car with the given carNumber:**

  "{carModel} == {carNumber} - {Has payed / Not payed}"

Examples

Sample code usage

`Const parking = new Parking(12);`
 	
`console.log(parking.addCar("Volvo t600", "TX3691CA"));`
`console.log(parking.getStatistics());`
 	
`console.log(parking.pay("TX3691CA"));`
`console.log(parking.removeCar("TX3691CA"));`

Corresponding output

`The Volvo t600, with a registration number TX3691CA, parked.`
`The Parking Lot has 11 empty spots left.`
`Volvo t600 == TX3691CA - Not payed`
`TX3691CA's driver successfully payed for his stay.`
`TX3691CA left the parking lot.`