5515. Design Parking System

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User Accepted:	0
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Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Design a parking system for a parking lot. The parking lot has three kinds of parking spaces: big, medium, and small, with a fixed number of slots for each size.

Implement the `ParkingSystem` class:

- `ParkingSystem(int big, int medium, int small)` Initializes object of the `ParkingSystem` class. The number of slots for each parking space are given as part of the constructor.
- `bool addCar(int carType)` Checks whether there is a parking space of `carType` for the car that wants to get into the parking lot. `carType` can be of three kinds: big, medium, or small, which are represented by `1`, `2`, and `3` respectively. **A car can only park in a parking space of its** `carType`. If there is no space available, return `false`, else park the car in that size space and return `true`.

Example 1:

```
Input
["ParkingSystem", "addCar", "addCar", "addCar", "addCar"]
[[1, 1, 0], [1], [2], [3], [1]]
Output
[null, true, true, false, false]

Explanation
ParkingSystem parkingSystem = new ParkingSystem(1, 1, 0);
parkingSystem.addCar(1); // return true because there is 1 available slot for a big car
parkingSystem.addCar(2); // return true because there is 1 available slot for a medium car
parkingSystem.addCar(3); // return false because there is no available slot for a small ca
parkingSystem.addCar(1); // return false because there is no available slot for a big car.
```

Constraints:

- `0 <= big, medium, small <= 1000`
- `carType` is `1`, `2`, or `3`
- At most `1000` calls will be made to `addCar`

JavaScript

```javascript
function ParkingSystem(big, medium, small) {
    this.p = { 'b': big, 'm': medium, 's': small };
};

ParkingSystem.prototype.addCar = function (carType) {
    if (carType == 1) {
        if (this.p['b'] == 0) {
            return false;
        } else {
            this.p['b']--;
            return true;
        }
    } else if (carType == 2) {
        if (this.p['m'] == 0) {
            return false;
        } else {
            this.p['m']--;
            return true;
        }
    } else {
        if (this.p['s'] == 0) {
            return false;
        } else {
            this.p['s']--;
            return true;
        }
    }
};


/**
 * Your ParkingSystem object will be instantiated and called as such:
 * var obj = new ParkingSystem(big, medium, small)
 * var param_1 = obj.addCar(carType)
 */
```

☐ **Custom Testcase** Use Example Testcases

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