

379. Design Phone Directory

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Design a phone directory that initially has `maxNumbers` empty slots that can store numbers. The directory should store numbers, check if a certain slot is empty or not, and empty a given slot.

Implement the `PhoneDirectory` class:

- `PhoneDirectory(int maxNumbers)` Initializes the phone directory with the number of available slots `maxNumbers`.
- `int get()` Provides a number that is not assigned to anyone. Returns `-1` if no number is available.
- `bool check(int number)` Returns `true` if the slot `number` is available and `false` otherwise.
- `void release(int number)` Recycles or releases the slot `number`.

Example 1:

Input
["PhoneDirectory", "get", "get", "check", "get", "check", "release", "check"]
[[3], [1], [1], [2], [1], [2], [2], [2]]
Output
[null, 0, 1, true, 2, false, null, true]

Explanation
`PhoneDirectory phoneDirectory = new PhoneDirectory(3);`
`phoneDirectory.get();` // It can return any available phone number. Here we assume it returns 0.
`phoneDirectory.get();` // Assume it returns 1.
`phoneDirectory.check(2);` // The number 2 is available, so return true.
`phoneDirectory.get();` // It returns 2, the only number that is left.
`phoneDirectory.check(2);` // The number 2 is no longer available, so return false.
`phoneDirectory.release(2);` // Release number 2 back to the pool.
`phoneDirectory.check(2);` // Number 2 is available again, return true.

Constraints:

- `1 <= maxNumbers <= 104`
- `0 <= number < maxNumbers`
- At most `2 * 104` calls will be made to `get`, `check`, and `release`.

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```
1 class PhoneDirectory {
2
3     public PhoneDirectory(int maxNumbers) {
4
5     }
6
7     public int get() {
8
9     }
10
11     public boolean check(int number) {
12
13     }
14
15     public void release(int number) {
16
17     }
18 }
19
20 /**
21  * Your PhoneDirectory object will be instantiated and called as such:
22  * PhoneDirectory obj = new PhoneDirectory(maxNumbers);
23  * int param_1 = obj.get();
24  * boolean param_2 = obj.check(number);
25  * obj.release(number);
26  */
```