



379. Design Phone Directory Premium

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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], [], [], [2], [], [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:

- $1 \leq \text{maxNumbers} \leq 10^4$
- $0 \leq \text{number} < \text{maxNumbers}$
- At most $2 * 10^4$ calls will be made to `get`, `check`, and `release`.

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Yes No

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