464. Can I Win

Difficulty : Medium

https://leetcode.com/problems/can-i-win

In the "100 game" two players take turns adding, to a running total, any integer from `1` to `10`. The player who first causes the running total to **reach or exceed** 100 wins.

What if we change the game so that players **cannot** re-use integers?

For example, two players might take turns drawing from a common pool of numbers from 1 to 15 without replacement until they reach a total >= 100.

Given two integers `maxChoosableInteger` and `desiredTotal`, return `true` if the first player to move can force a win, otherwise, return `false`. Assume both players play **optimally**.

Example 1:

```
Input: maxChoosableInteger = 10, desiredTotal = 11
Output: false
Explanation:
No matter which integer the first player choose, the first player will lose.
The first player can choose an integer from 1 up to 10.
If the first player choose 1, the second player can only choose integers from 2 up to 10.
The second player will win by choosing 10 and get a total = 11, which is >= desiredTotal.
Same with other integers chosen by the first player, the second player will always win.
```

Example 2:

```
Input: maxChoosableInteger = 10, desiredTotal = 0
Output: true
```

Example 3:

```
Input: maxChoosableInteger = 10, desiredTotal = 1
Output: true
```

Constraints:

- `1 <= maxChoosableInteger <= 20`
- `0 <= desiredTotal <= 300`