464. 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