

@LeetCode

You have an initial power  $P$ , an initial score of  $0$  points, and a bag of tokens.

Each token can be used at most once, has a value  $token[i]$ , and has potentially two ways to use it.

- If we have at least  $token[i]$  power, we may play the token face up, losing  $token[i]$  power, and gaining  $1$  point.
- If we have at least  $1$  point, we may play the token face down, gaining  $token[i]$  power, and losing  $1$  point.

Return the largest number of points we can have after playing any number of tokens.

**Example 1:**

**Input:** `tokens = [100]`, `P = 50`

**Output:** `0`

**Example 2:**

**Input:** `tokens = [100,200]`, `P = 150`

**Output:** `1`

**Example 3:**

**Input:** `tokens = [100,200,300,400]`, `P = 200`

**Output:** `2`

**Note:**

1. `tokens.length <= 1000`
2. `0 <= tokens[i] < 10000`
3. `0 <= P < 10000`