

5926. Time Needed to Buy Tickets

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There are n people in a line queuing to buy tickets, where the 0^{th} person is at the **front** of the line and the $(n - 1)^{\text{th}}$ person is at the **back** of the line.

You are given a **0-indexed** integer array `tickets` of length n where the number of tickets that the i^{th} person would like to buy is `tickets[i]`.

Each person takes **exactly 1 second** to buy a ticket. A person can only buy **1 ticket at a time** and has to go back to **the end** of the line (which happens **instantaneously**) in order to buy more tickets. If a person does not have any tickets left to buy, the person will **leave** the line.

Return the **time taken** for the person at position k (**0-indexed**) to finish buying tickets.

User Accepted:	8
User Tried:	14
Total Accepted:	8
Total Submissions:	14
Difficulty:	Easy

Example 1:

Input: `tickets = [2,3,2]`, `k = 2`
Output: 6
Explanation:
– In the first pass, everyone in the line buys a ticket and the line becomes `[1, 2, 1]`.
– In the second pass, everyone in the line buys a ticket and the line becomes `[0, 1, 0]`.
The person at position 2 has successfully bought 2 tickets and it took $3 + 3 = 6$ seconds.

Example 2:

Input: `tickets = [5,1,1,1]`, `k = 0`
Output: 8
Explanation:
– In the first pass, everyone in the line buys a ticket and the line becomes `[4, 0, 0, 0]`.
– In the next 4 passes, only the person in position 0 is buying tickets.
The person at position 0 has successfully bought 5 tickets and it took $4 + 1 + 1 + 1 + 1 = 8$ seconds.

Constraints:

- $n == \text{tickets.length}$
- $1 \leq n \leq 100$
- $1 \leq \text{tickets}[i] \leq 100$
- $0 \leq k < n$

JavaScript

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```
1 const timeRequiredToBuy = (a, k) => {
2   a = a.map((x, i) => [x, i]);
3   let res = 1;
4   while(1) {
5     let cur = a.shift();
6     // pr(a, "cur", cur);
7     if (cur[1] == k && cur[0] == 1) break;
8     cur[0]--;
9     if (cur[0] > 0) a.push(cur);
10    res++;
11  }
12  return res;
13 };
```

☐ Custom Testcase

Use Example Testcases

Run

Submit

Submission Result: **Accepted** (/submissions/detail/586834956/) ?

More Details > (/submissions/detail/586834956/)

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