

5621. Number of Students Unable to Eat Lunch

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The school cafeteria offers circular and square sandwiches at lunch break, referred to by numbers `0` and `1` respectively. All students stand in a queue. Each student either prefers square or circular sandwiches.

The number of sandwiches in the cafeteria is equal to the number of students. The sandwiches are placed in a **stack**. At each step:

- If the student at the front of the queue **prefers** the sandwich on the top of the stack, they will **take it** and leave the queue.
- Otherwise, they will **leave it** and go to the queue's end.

This continues until none of the queue students want to take the top sandwich and are thus unable to eat.

User Accepted:	0
User Tried:	1
Total Accepted:	0
Total Submissions:	1
Difficulty:	Easy

You are given two integer arrays `students` and `sandwiches` where `sandwiches[i]` is the type of the  $i^{\text{th}}$  sandwich in the stack ( $i = 0$  is the top of the stack) and `students[j]` is the preference of the  $j^{\text{th}}$  student in the initial queue ( $j = 0$  is the front of the queue). Return *the number of students that are unable to eat*.

Example 1:

**Input:** `students = [1,1,0,0]`, `sandwiches = [0,1,0,1]`

**Output:** `0`

**Explanation:**

- Front student leaves the top sandwich and returns to the end of the line making `students = [1,0,0,1]`.
- Front student leaves the top sandwich and returns to the end of the line making `students = [0,0,1,1]`.
- Front student takes the top sandwich and leaves the line making `students = [0,1,1]` and `sandwiches = [1,0,1]`.
- Front student leaves the top sandwich and returns to the end of the line making `students = [1,1,0]`.
- Front student takes the top sandwich and leaves the line making `students = [1,0]` and `sandwiches = [0,1]`.
- Front student leaves the top sandwich and returns to the end of the line making `students = [0,1]`.
- Front student takes the top sandwich and leaves the line making `students = [1]` and `sandwiches = [1]`.
- Front student takes the top sandwich and leaves the line making `students = []` and `sandwiches = []`.

Hence all students are able to eat.

Example 2:

**Input:** `students = [1,1,1,0,0,1]`, `sandwiches = [1,0,0,0,1,1]`

**Output:** `3`

Constraints:

- `1 <= students.length, sandwiches.length <= 100`
- `students.length == sandwiches.length`
- `sandwiches[i]` is `0` or `1`.
- `students[i]` is `0` or `1`.

JavaScript

```
1 /**
2  * @param {number[]} students
3  * @param {number[]} sandwiches
4  * @return {number}
5  */
6 var countStudents = function(students, sandwiches) {
7
8  };
```