[LeetCode](https://leetcode.com/problems/number-of-students-unable-to-eat-lunch/description/?envType=daily-question&envId=2024-04-08)

<https://github.com/AdityaKonda6/-50DaysOfCoding>

<https://leetcode.com/problems/number-of-students-unable-to-eat-lunch/description/?envType=daily-question&envId=2024-04-08>

<https://www.linkedin.com/in/aditya-adi-konda/>

Day 49 of [#50dayscodingchallenge](https://www.linkedin.com/feed/hashtag/?keywords=50dayscodingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633):  
[#leetcode](https://www.linkedin.com/feed/hashtag/?keywords=leetcode&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodechallenge](https://www.linkedin.com/feed/hashtag/?keywords=leetcodechallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodestreak](https://www.linkedin.com/feed/hashtag/?keywords=leetcodestreak&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode2024](https://www.linkedin.com/feed/hashtag/?keywords=leetcode2024&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode50day](https://www.linkedin.com/feed/hashtag/?keywords=leetcode50day&highlightedUpdateUrns=urn:li:activity:7166316239483461633)  
   
Ventured further into my coding journey today, tackling the engaging LeetCode Problem "Successfully solved LeetCode Problem ���"

“1700. Number of Students Unable to Eat Lunch.”

   
✨ Task: 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.

You are given two integer arrays students and sandwiches where sandwiches[i] is the type of the ith sandwich in the stack (i = 0 is the top of the stack) and students[j] is the preference of the jth student in the initial queue (j = 0 is the front of the queue). Return the number of students that are unable to eat.

Examples:

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

Let's Connect:

If you find this problem intriguing or have insights to share, let's connect! I'm passionate about problem-solving, algorithmic thinking, and collaborative learning. Feel free to comment or reach out for engaging discussions and knowledge exchange.Unravel the mystery using your coding skills!

[#CodingChallenge](https://www.linkedin.com/feed/hashtag/?keywords=codingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#Algorithm](https://www.linkedin.com/feed/hashtag/?keywords=algorithm&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#LinkedInPost](https://www.linkedin.com/feed/hashtag/?keywords=linkedinpost&highlightedUpdateUrns=urn:li:activity:7166316239483461633) #Algorithm #Optimization #DataStructures #CodingChallenge  
  
Excited about the progress and challenges ahead!  
   
Make Sure You Follow My GitHub For Solutions: <https://github.com/AdityaKonda6/-50DaysOfCoding>  
  
  
Happy coding!

**Solution:-**

class Solution {

  public int countStudents(int[] students, int[] sandwiches) {

    int[] count = new int[2];

    for (final int student : students)

      ++count[student];

    for (int i = 0; i < sandwiches.length; ++i) {

      if (count[sandwiches[i]] == 0)

        return sandwiches.length - i;

      --count[sandwiches[i]];

    }

    return 0;

  }

}

