

After years of hard study and multiple PhD's in complex fields, you have been able to secure a job as the cook at the canteen of a close by Philosophy University with 4 philisophers. It has fallen on you to write a program to predict food wastage. The 4 philosophers of this institution (Alice, Brian, Clara and David) all have exacting standards of gastronomy. As such, they will not eat anything but their favorite dish. Unfortunately, you suffer from linear algebra and are unable to reorder the linear queue of food that is coming out of the kitchen. If their favorite dish is not present at the front of the queue, a philosopher will go away and return another time to find if it now is.

Given the following order of visitations to the canteen window:

Alice, Brian, Clara, Alice, Alice, Clara, Brian, David, Brian

And the following immutable order of food.

Burrito, Curry, Dumpling, Curry, Hummus

Results in the following actions

Skip, Skip, Take, Take, Skip, Skip, Take, Skip, Skip

And the following remaining items of food.

Curry, Hummus

The resulting length of the unused food queue is 2. This number is the solution.

Write code to generate the number of dishes remaining uneaten at the end of the day. Max count of people queue, as well as the max count of food in the queue = 100,0000. The input will be in 2 lines of comma separated lists.