

COCI '20 Contest 4 #1 Pizza

Time limit: 1.0s **Memory limit:** 512M

After a long and miserable day at work, Mirko decided to order a pizza for dinner to cheer himself up. In a big pile of papers on his desk, he found a flyer of a nearby pizza restaurant. The restaurant offers m different pizzas. Pizza toppings are labeled with positive integers. i^{th} pizza has k_i toppings, with labels $b_{i,1}, b_{i,2}, \dots, b_{i,k_i}$.

Mirko is very picky when it comes to food. He doesn't like n toppings, those with labels a_1, a_2, \dots, a_n , so he wants to order a pizza that doesn't contain any of those toppings. Determine the number of pizzas that Mirko can order.

Constraints

Subtask	Points	Constraints
1	20	$n = 1$ $k_1 = k_2 = \dots = k_m = 1$
2	30	No additional constraints.

Input Specification

The first line contains an integer n ($1 \leq n \leq 100$), the number of toppings, followed by n distinct integers a_i ($1 \leq a_i \leq 100$), the labels of toppings Mirko dislikes.

The second line contains an integer m ($1 \leq m \leq 100$), the number of pizzas.

The following m lines describe the pizzas. The i^{th} line contains an integer k_i ($1 \leq k_i \leq 100$), the number of toppings, followed by k_i distinct integers $b_{i,j}$ ($1 \leq b_{i,j} \leq 100$), the labels of toppings on the i^{th} pizza.

The pizzas, i.e. the sets of toppings, will be distinct.

Output Specification

Output the number of pizzas that Mirko can order.

Sample Input 1

```
1 2
3
1 1
1 2
1 3
```

Sample Output 1

2

Sample Input 2

```
2 1 2
4
2 1 4
3 1 2 3
2 3 4
3 3 5 7
```

Sample Output 2

2

Sample Input 3

```
1 4
3
1 1
1 2
1 3
```

Sample Output 3

3