

DMOPC '19 Contest 5 P1 - Conspicuous Cryptic Checklist

Time limit: 2.0s **Memory limit:** 128M

Tzak has spent the weekend hastily preparing DMOPC problems! Unfortunately, he is now behind on several assignments. After rummaging through his backpack, he realizes that he has N items. To save space, he records the i -th item as a string, s_i , on his checklist. He has M upcoming assignments, the i -th of which requires T_i items to complete, r_1, r_2, \dots, r_{T_i} . If **Tzak** has all T_i required items, he can complete the i -th assignment. Otherwise, he flunks it. Help him determine how many assignments he can complete!

Constraints

In all subtasks,

$$1 \leq N, M, T_i \leq 200$$

$$1 \leq |s_i|, |r_i| \leq 10 \text{ where } |S| \text{ denotes the length of string } S$$

Input Specification

The first line contains two space-separated integers, N and M .

The next N lines contain a single string, s_i . It is guaranteed that all the strings will be unique.

The next M sections contain a single integer T_i , followed by T_i lines each containing a single string, r_i .

Output Specification

Output a single integer on a single line, the answer to the problem.

Sample Input

3 4
chalk
cheese
charger
1
cheese
2
coins
cash
3
charger
chalk
caffeine
3
cheese
charger
cheese

Sample Output

2