Heimilisverk Problem ID: heimilisverk

Ómar is a very responsible boy and has a list of chores he needs to do. The problem is that Ómar is very lazy, so the list of unfinished chores has become quite long. So long, in fact, that he does not remember what chores he has already put on the list and has thus put duplicates into the list every now and then.

Now he finally intends to do some chores from the list, but he doesn't want to repeat himself. Can you help him remove duplicate chores from his list? That is to say, if it appears more than once, he only wants the first instance of it to remain on the list.

Input

The first line of the input contains the positive integer N, denoting the number of chores on the list. Then there are N lines, each with one chore.

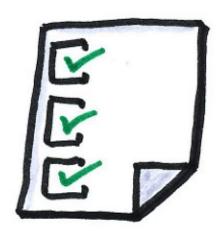


Image from Oliver Tacke

Output

The output should contain the filtered list, with one chore from the list on each line. The order matters and should be like in the input.

Scoring

The solution will be tested on input data of varying difficulty and the data is divided into groups as shown in the table below. The solution will then be scored according to how many groups are solved.

Group	Points	Constraints
1	20	$N \leq 10$, Each line is at most 10 characters
2	20	$N \leq 10^5$, Each line is at most 2 characters
3	20	$N \leq 10^5$, Each line is at most 10 characters
4	20	$N \leq 10^3$, Each line is at most 1000 characters
5	20	$N \leq 10^6$, The total number of characters in the input is at most 10^6

Sample Input 1

Sample Output 1

4	Skuragolfid
Skuragolfid	Takatil
Takatil	Thrifabilinn
Skuragolfid	
Thrifabilinn	

Sample Input 2

Sample Output 2

2	Takaurvelinni
Takaurvelinni	Ryksuga
Ryksuga	

Sample Input 3

Sample Output 3

5	Takatil
Takatil	

Sample Input 4

```
Kill all humans
Build my own theme park
With Black Jack
and hookers
Forget the park
Kill all humans
Kill all humans
Build my own lunar lander
With Black Jack
and hookers
Forget the lunar lander and the Black Jack
Kill all humans
Did I mention killing all humans already?
Imbibe excessive amounts of alchohol
Become 500 feet tall
Find out what would happen if I were human
Become human
Kill all humans
Wait, no...
```

Sample Output 4

```
Kill all humans
Build my own theme park
With Black Jack
and hookers
Forget the park
Build my own lunar lander
Forget the lunar lander and the Black Jack
Did I mention killing all humans already?
Imbibe excessive amounts of alchohol
Become 500 feet tall
Find out what would happen if I were human
Become human
Wait, no...
```