Social Network 4



In a galaxy far, far away, the hottest new social network is throwing things into chaos. Everyone is signing up for Jabba Jabber accounts in droves, but not all of them will get the usernames they want. Not even Darth Vader.

Due to this shortage, usernames are being created with the following substitutions:

```
"-" and " " become "_"
"E" becomes "3"
"O" becomes "0"
"I" becomes "1"
"A" becomes "4"
```

Who will have to make the most substitutions to their name to officially join this new virtual world?

Input Format

Each test case begins with a single integer N denoting the number of items in the list, followed by the usernames, one on each line. At least one username will contain a substituted character.

Constraints

```
1 <= N <= 100
```

Output Format

Print out the max number of substitutions as well as the corresponding username, (characters defined as substitutions that are part of the original name will also be counted). If there is a tie, print out the name that comes first in the list.

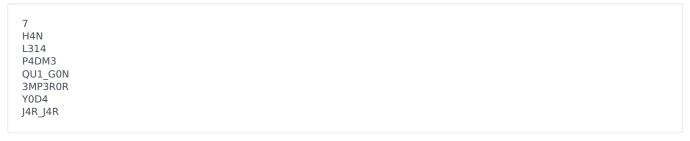
Sample Input 0

```
3
4N4K1N
D4RTH_V4D3R
LUK3
```

Sample Output 0

```
D4RTH_V4D3R 4
```

Sample Input 1



Sample Output 1

```
L314 3
```