

Problem E

When the Christmas dinner is over, it's time to sing carols. Unfortunately, not all the family members know the lyrics to the same carols. Everybody knows at least one, though.

You are given a `String[]` lyrics. The *j*-th character of the *i*-th element of lyrics is 'Y' if the *i*-th person knows the *j*-th carol, and 'N' if he doesn't. Return the minimal number of carols that must be sung to allow everyone to sing at least once.

- lyrics will contain between 1 and 30 elements, inclusive.
- Each element of lyrics will contain between 1 and 10 characters, inclusive.
- Each element of lyrics will contain the same number of characters.
- Each element of lyrics will contain only 'Y' and 'N' characters.
- Each element of lyrics will contain at least one 'Y' character.

See examples for input/output format.

E.IN

1

3

2

YN

NY

YN

E.OUT

1