Towers

There are N residential towers in a city standing side by side. Tom is standing on the first building and watch to reach the last one. But, he can jump only to either of the two buildings(if present) in either side of the building on which he is standing or to the building whose name start with the same letter as the building on which he is standing. Calculate the minimum number of jumps Tom needs to make in order to reach the last building.

Input:
First line contains N(<=10^5) followed by N lines containing the name of the buildings(Names can have spaces and length <= 10^5 and all are lower-case).

Output:
Single line containing the number of jumps required.

Time Limit : 1 sec

Example:

Input :
5
skyline towers
blue bells
orchard house
lakeshore
shimmering heights

Output:
1