Write a program **words** that scans a sequence of words and computes the number of different words in the sequence.

**Input**: The first line of the input file **words.in** contains a single integer M - the total number of words in the sequence. The following M lines contain one word. All words consist of lowercase latin letters and are not longer than 20 symbols.

**Output**: The output file **words.out** should contain a single integer - the number of different words in the sequence.

Constraints::

 $1 \le M \le 1000$ 

Example:

gossips.in	gossips.out
5	4
ala	
bala	
alab	
bala	
labab	