B	Stem	
	Input	**b.in**
	Output	**Standard Output**

A stemming algorithm is a process of linguistic normalization, in which the variant forms of a word are reduced to a common form, usually by stripping each word of inflectional affix. The term affix refers to either a prefix or a suffix (or ending). The residual part is called the '*stem*'. Now we'll only work with a suffix part.

There are five steps to work with the suffix.

1. The first set of suffix parts are '*ed* , '*ing*, 'e*s*, and '*s*'. So, if the word ends with these suffixes, take it off. The precedence is importance and the step is a single process. For example, if the word ends with *ing*, take it off and quit this step.
2. If the word ends with y, replace y with i.
3. If the word ends with the following suffixes '*ational*' , '*tional*', '*izer*', '*ation*', '*ator*', '*fulness*', '*alize*', or '*ousness*', replaced them by '*ate*', '*tion*', '*ize*', '*ate*', '*ate*', '*ful*', '*al*', or '*ous*', respectively. Again, the precedence is importance and the step is a single process.
4. If the word ends with the following suffixes '*ative*', '*ful*', '*ness*', '*ment*', '*ance*', '*ence*', '*ous*', '*ate*', '*ize*', '*ion*', '*ive*', and '*er*', these suffixes must be removed. The precedence is importance. However the step is an iteration process, which means if the word still ends with these suffixes, the step must be repeated.
5. After all, if the word still ends with 'e', take it off. It's an iteration process.

Example the result from each step.

word	step 1	step 2	step 3	step 4	step 5
stayinged	staying	staying	staying	staying	staying
stayedingses	stayedings	stayedings	stayedings	stayedings	stayedings
yedtionalying	yedtionaly	yedtionali	yedtionali	yedtionali	yedtionali
yfulators	yfulator	yfulator	yfulate	y	y
aionionativefulnessmentance	aionionativefulnessmentance	aionionativefulnessmentance	aionionativefulnessmentance	a	a
aerionionativefulnessmentance	aerionionativefulnessmentance	aerionionativefulnessmentance	aerionionativefulnessmentance	a	a
eerionativefulnessmentance	eerionativefulnessmentance	eerionativefulnessmentance	eerionativefulnessmentance	e	-
gateeativeizering	gateeativeizer	gateeativeizer	gateeativeize	gatee	gat

Input

The input consists of n line lower case Strings. The input ends with zero (0).

Output

Print out the stem of each input. If after the stemming process, the word contains no character, state it with "-" .

You must display the results in an exact form as shown in the sample output below.

Sample Input	Sample Output
stayinged stayedingses yedtionalying yfulators aionionativefulnessmentance aerionionativefulnessmentance eerionativefulnessmentance gateeativeizering 0	staying stayedings yedtionali y a a - gat