Problem 4: Spy Message Transformer

Time limit: 2 seconds

A security agency has its spies spread across the country for surveillance purposes. They require a mobile app that will be used to send messages to the command center. This app will transform messages into an unreadable form using their internal algorithm.

The message can contain alphabets ***[a-z]***, numbers ***[0-9]*** and special characters. The characters in every word should be reversed, and then the order of words in the message should be reversed. To hide the spaces in the message, replace them with the length of the smallest word. Finally, your program should print the transformed message.

Input:

The first line contains the number of test cases ***0<N<100***. Each of the subsequent N lines is a string representing a meaningful message which may contains alphabets ***[a-z]***, numbers ***[0-9]*** and special characters.

Output:

Output is string message in non-readable form which contains alphabets ***[a-z]***, numbers ***[0-9]*** and special characters. It should not contain any spaces.

Sample Input	Sample Output
3 Where are we going? I can't reach there I am work and waiting for your response!	?gniog2ew2era2erehW ereht1hcaer1t'nac1I !esnopser1ruoy1rof1gnitiaw1dna1krow1ma1I

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