UCF "Practice" Local Contest — Aug 27, 2016

g2g c u l8r

filename: texting
(Difficulty Level: Easy)

According to the national statistics, a teenager sends/receives 100+ text messages a day. Dr. Orooji's teenage children are no exception but the problem is Dr. O (an old-fashioned, face-to-face communicator) has difficulty reading text messages full of abbreviations (short-hands) sent to him by his children. Dr. O needs your help reading these text messages.

The Problem:

Given the list of abbreviations and a paragraph, you are to expand the text (paragraph) so that Dr. O can read it easily.

The Input:

The first input line contains an integer, n ($1 \le n \le 20$), indicating the number of abbreviations. These abbreviations are on the following n input lines, one per line. Each input line starts in column 1 and contains an abbreviation (1-5 characters, consisting of only lowercase letters and/or digits). The abbreviation is followed by exactly one space, and this is followed by the expanded version of the abbreviation (1-50 characters, consisting of only lowercase letters and spaces; assume the expanded version does not start or end with a space and contains no multiple consecutive spaces between words). Assume that all abbreviations are distinct, i.e., no duplicates.

The list of abbreviations is followed by a positive integer, p, indicating the number of input lines containing the paragraph to be expanded. The paragraph is on the following p input lines. Assume these input lines do not exceed column 50, do not start or end with a space, and each line contains at least one word. The paragraph will contain only lowercase letters, digits, and spaces. Assume that there will not be multiple consecutive spaces in the input paragraph.

A word is defined as a consecutive sequence of letters/digits. Assume that a word will be entirely on one input line, i.e., a word is not broken over two or more lines.

The Output:

Each line of the input paragraph must be on one line of output. The input line must be printed in the output exactly the same (spacing). The only exception is that each abbreviation must be replaced by its expanded version, i.e., when an abbreviation is found in the input, its expanded version must be output.

Note that an abbreviation must match a word completely and not just part of a word. For example, if u is an abbreviation for "you", then u must appear as a word by itself in the paragraph

in order to be replaced, i.e., if the abbreviation is part of a word in the paragraph (e.g., the paragraph contains the word buy or ugly or you), the u in these words should not be replaced.

Sample Input:

8
g2g got to go
g good
c see
18 late
18r later
d i am done
u you
r are
6
hi
how r u
you tell me
you are 18
d
c u 18r

Sample Output:

hi
how are you
you tell me
you are late
i am done
see you later