

Displace

You are given two strings S_1 , S_2 of not more than 250 characters each. S_1 does not contain characters '(' and ')'. You can swap two consecutive characters in S_1 . Your task is to do it in as small a number of swapping operations as possible to obtain a string which contains S_2 as a substring (you can assume that for the given input, this can always be done).

Input

The first line of the input file contains an integer t representing the number of test cases ($t < 20$). Then t test cases follow. Each test case has the following form:

- The first line contains S_1
- The second line contains S_2

Output

For each test case, output 0 iff you do not want to solve this test case. Otherwise, output a line containing the number 1 and two more lines of the following form:

- The first line contains an integer k representing the number of swap operations
- The second line contains k integers p_1 p_2 , ..., p_k separated by single spaces, p_i means that in the i -th operation, you swapped the i -th character and the $(i+1)$ -th character in S_1 .

Score

Your task is to minimise your score for this problem. If you choose to solve a test case and the number of swap of operations is smaller than 5000, your score is equal to the number of operations. Otherwise, your score is 5000. Your total score is equal to the sum of scores for individual tests.

Example

Input:

```
1
ABCDEFGH
FC
```

Output:

```
1
3
5 4 3
```

Score:

```
3
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