Longest common substring (full)
1 second, 256MB

You are given two strings **S** and **T** consists of capital letters of length at most 200 characters. You want to find the longest common substring of **S** and **T**.

In this task you only need to output the length of the longest common substring.

Input
There are two lines. The first line contains **S** and the second line contains **T**.

Output
You have to output two lines. The first line contains a single integer, the length of the longest common substring. The second line contains the longest common substring. **If there are more than one possible longest substrings, you can output any one of them.**

Example 1

Input	Output
AABBCDEF ABECEF	5 ABCEF

Example 2

Input	Output
AAABBBABCABC AABACABCEDF	8 AABACABC