

Problem C: Longest Common Subsequence

Sequence 1:



Sequence 2:



Given two sequences of characters, print the length of the longest common subsequence of both sequences. For example, the longest common subsequence of the following two sequences:

```
abcdgh
aedfhr
```

is adh of length 3.

Input consists of pairs of lines. The first line of a pair contains the first string and the second line contains the second string. Each string is on a separate line and consists of at most 1,000 characters

For each subsequent pair of input lines, output a line containing one integer number which satisfies the criteria stated above.

Sample input

```
a1b2c3d4e
zz1yy2xx3ww4vv
abcdgh
aedfhr
abcdefghijklmnopqrstuvwxyz
a0b0c0d0e0f0g0h0i0j0k0l0m0n0o0p0q0r0s0t0u0v0w0x0y0z0
abcdefghijklmnopqrstuvwxyzvwutsrqpo
opqrstuvwxyzabcdefghijklmnopqrstuvwxyz
```

Output for the sample input

```
4
3
26
14
```

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