5C Find a Longest Common Subsequence of Two Strings

Longest Common Subsequence Problem

Find a longest common subsequence of two strings.

Input: Two strings.
Output: A longest common subsequence of these strings.

AACCTTGG
ACACTGTGA $\longrightarrow$ AACTGG

Formatting

Input: Two newline-separated strings v and w.
Output: A longest common subsequence of v and w as a string.

Constraints

- The lengths of v and w will be between 1 and 10^3.

- Both v and w will be DNA strings.