**COMMON CHILD**

This program calculates the **length of the longest common subsequence (LCS)** between two strings, also called a “common child.” A common child is a string that can be derived from both input strings by deleting zero or more characters without changing the order of the remaining characters.

The commonChild function uses **dynamic programming** to solve this efficiently. It constructs a 2D array dp where dp[i][j] represents the LCS length between the first i characters of s1 and the first j characters of s2. By iterating through both strings, it fills the array based on whether the characters match or not, using the classic LCS recurrence relation.

Finally, the program outputs dp[n][m], which gives the length of the longest common subsequence between the full strings s1 and s2.