# 1143. Longest Common Subsequence

## SOLUTION IN JAVA

class Solution {

public int longestCommonSubsequence(String text1, String text2) {

final int m = text1.length();

final int n = text2.length();

// dp[i][j] := the length of LCS(text1[0..i), text2[0..j))

int[][] dp = new int[m + 1][n + 1];

for (int i = 0; i < m; ++i)

for (int j = 0; j < n; ++j)

dp[i + 1][j + 1] = text1.charAt(i) == text2.charAt(j)

? 1 + dp[i][j]

: Math.max(dp[i][j + 1], dp[i + 1][j]);

return dp[m][n];

}

}