

## Quiz-6 (E): Design and Analysis of Algorithms (Spring-2024)

### SOLUTION

Using the bottom-up approach of Dynamic Programming (learned in the class), find the LCS of  $X = \textit{designofalgorithms}$  and  $Y = \textit{iwillpassalgo}$ . Completely fill the  $c$  and  $b$  tables. Construct the optimal solution (4<sup>th</sup> step of a DP algorithm). Show all steps.

**Length of LCS = 5**

**LCS = ialgo**