

15.4-2 : ρ version of this without b table.

PRINT-LCS(b, X, i, j)

1 if $i == 0$ or $j == 0$

2 return

3 if $b[i, j] == "\nwarrow"$

4 PRINT-LCS($b, X, i-1, j-1$)

5 print x_i

6 elseif $b[i, j] == "\uparrow"$

7 PRINT-LCS($b, X, i-1, j$)

8 else PRINT-LCS($b, X, i, j-1$)

This gives a different
LCS from normal LCS
algorithms.

Print-LCS(c, X, i, j)

1 if $i == 0$ or $j == 0$
return

if $c[i][j] == c[i-1][j]$ # UP \uparrow

Print-LCS($c, X, i-1, j$)

elseif $c[i][j] == c[i][j-1]$ # Left \leftarrow

Print-LCS($c, X, i, j-1$)

else # upper left \nwarrow

Print-LCS($c, X, i-1, j-1$)

Print x_i

②

Print_LCS(c, X, Y, i, j):

if $i == 0$ or $j == 0$:
return

if $X[i-1] == Y[j-1]$: # upper left ↖

Print_LCS($c, X, Y, i-1, j-1$)

Print x_i

else:

if $c[i-1][j] \geq c[i][j-1]$: # up ↑

Print_LCS($c, X, Y, i-1, j$)

else: # left ←

Print_LCS($c, X, Y, i, j-1$)