Date:

Longest Common Subsequence

1) Make c [:][0] = 0 and c [0][:] = 0

2) if $x_i = y_i$ then

c[i, i] = c[i-1, j-1]+1 8" ""

3) else if c[i-1,j]> c[i,j-1] then

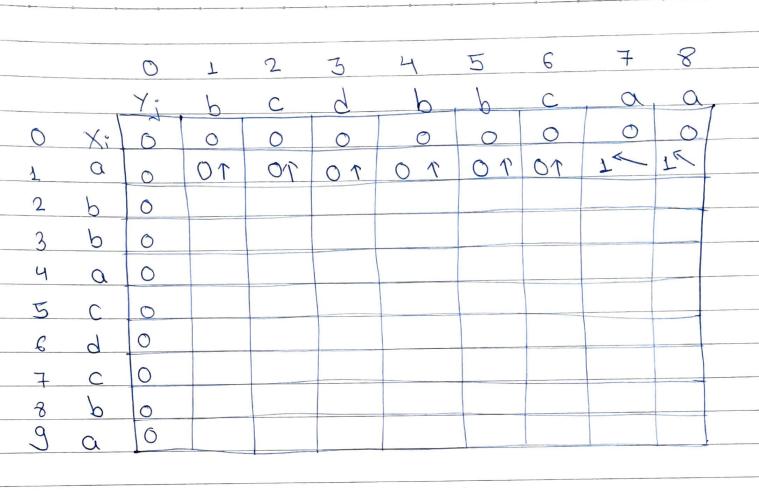
c[i,j] = c[i-1,j] & "1"

4) else c[i,j] = c[i,j-1] & " <-- "

Example: -

Si = abbacdcba

Sz = bcdbbcaa



$$\frac{C[1,1]}{=c[0,1]}$$

$$\begin{array}{rcl}
c[1,2] &=& c[i-1,i] \\
&=& c[o,2] \\
&=& o"v"
\end{array}$$

$$\begin{array}{rcl}
c\Gamma_{1,3}\overline{J} &=& c\Gamma_{i-1} &; \overline{J} \\
&=& c\Gamma_{0,3}\overline{J} \\
&=& o"\wedge"
\end{array}$$

$$C[\underline{1}, \underline{4}] = C[\underline{i-1}, \underline{i}]$$

$$= C[\underline{0}, \underline{4}]$$

$$= 0"1"$$

$$C[1,5] = C[i-1,j]$$

$$= C[0,4]$$

$$= 0"7"$$

$$C[\Gamma_{1}, \epsilon] = C[\Gamma_{1}, \Gamma_{1}]$$

$$= C[\Gamma_{0}, 5]$$

$$= O'' \Gamma''$$

$$C[1,7] = C[i-1]+1$$

$$= C[0,6]+1$$

$$= 0+1$$

$$= 1 "K"$$

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$$C[2,2] = C[i,i-1]$$

$$= C[2,i]$$

$$= i'' \leftarrow i''$$

2 b 0 ∇1 1← 1← ∇1 ∇1 1← 1↑ 1 3 b 0 ∇1 1↑ 1↑ ∇2 ∇2 2← 1← 1	al I
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	^
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7 c 0 1↑	
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9 a 0 11↑ 2↑ 3↑ 4↑ 4↑ 4↑ √5 √	

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2	b	0	K 1	1←	1←	K 1	⊼ 1	1←	1↑	1个
3	b	0	K 1	1↑	1↑	K 2	K 2	2←	1←	1←
4	a	0	1个	1↑	1个	2↑	2个	2↑	K 3	K 2
5	С	0	11	R 2	2←	2个	2个	₹ 3	3↑	3←
6	d	0	1↑	2↑	E 3	3←	3←	3↑	3↑	3↑
7	С	0	1↑	► 2	3↑	3↑	3↑	(K4)	4←	4←
8	b	0	K 1	2↑	3↑	K 4	K 4	4↑	4↑	41
9	а	0	11	2↑	3↑	4↑	4↑	4↑	₹5	0

b c d

a