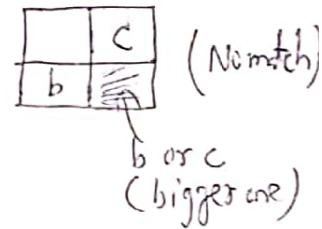
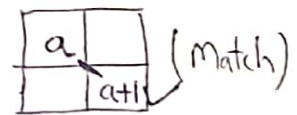


# Longest Common Subsequence

X: BDCABA

Y: ABCBDAB

Rules :-



	B	D	C	A	B	A
A	0	0	0	0	0	0
B	0	1	1	1	2	2
C	0	1	1	2	2	2
B	0	1	1	2	3	3
D	0	1	2	2	3	3
A	0	1	2	2	3	4
B	0	1	2	2	3	4

(length of  
LCS = 4)

Ans:- BDAB

For find the LCS, we perform "Backtracking"

- We can either traverse on left side or top side.
- When we enter from one region (say "4") to another region (say "3"); we need to use the bridge.
- In this example, we start with "4" and go towards left ( $\leftarrow$ ); when we reach another region ("3"); we print the character (letter) which was responsible for that bridge.

	B	D	C	A	B	A
A	0	0	0	0	0	0
B	0	1	1	1	2	2
C	0	1	1	2	2	2
D	0	1	2	2	3	3
A	0	1	2	3	3	4
B	0	1	2	3	4	4