

Find the longest common subsequence of below strings:

$X = \langle 1, 0, 0, 1, 1, 0 \rangle$

$Y = \langle 0, 1, 0, 0, 1, 1 \rangle$

Solution:

	y_j	0	1	0	0	1	1
x_i	0	0	0	0	0	0	0
1	0	0	1	1	1	1	1
0	0	0	1	1	2	2	2
0	0	0	1	1	2	3	3
1	0	1	2	2	3	4	4
1	0	1	2	2	3	4	5
0	0	1	2	3	3	4	5

Notes:

$b \rightarrow a$
 $a \leftarrow \max(a, b)$
 if $x \neq y$ then $a \leftarrow a + 1$
 if $x = y$ then $a \leftarrow a + 1$

Ans: 10011 (= 19) is the longest common subsequence str