All: This is just to let you know that there is a typo in question 4 of the Suggested Exercises of subsection 9.1. The question concerns itself with finding out how many LCS's there are. The typo is in the boundary: the left-most column and the top row should have N(0, --) = N(--,0) = 0. (And not N(0, --) = N(--,0) = 1 as it currently shows).

End result: I will NOT ask a question related to finding how many LCS's there are using N(i,j). – appie

$n] = [p,\ n]$, if $\nwarrow \in MyTrack[p,\ n]$ whereas $\nwarrow \notin MyTrack[i,\ n]$ for all $i = p+1\ \ldots\ m-1$ or $\ell d[m,\ n] = [0,\ 0]$ if is no more "$\nwarrow$" to the left. Also,

$, n] = [m,\ q]$, if $\nwarrow \in MyTrack[m,\ q]$ whereas $\nwarrow \notin MyTrack[m,\ j]$ for all $j = q+1\ \ldots\ n-1$ or $ud[m,\ n] = [0,\ 0]$ if is no more "$\nwarrow$" to the top. These are essentially pointing to the highest row-/column- values that have a diagonal arrow. With new functions, the correct equation becomes:

$$i] \leftarrow N(\ell d[i,j])\cdot\mathcal{I}(\text{“}\leftarrow \in Track[i,j]'') + N(ud[i,j])\cdot\mathcal{I}(\text{“}\uparrow \in Track[i,j]'') + N[i-1,j-1]\cdot\mathcal{I}(\text{“}\nwarrow \in Track[i,j]''). \quad (36$$

ooks pretty complicated, but it is not really that bad. Consider the table we have seen in the previous section, but now add the counter to it.

	$j=0$ $y_0=\oslash$	$j=1$ $y_1=A$	$j=2$ $y_2=A$	$j=3$ $y_3=A$	$j=4$ $y_4=A$	$j=5$ $y_5=B$	$j=6$ $y_6=B$	$j=7$ $y_7=B$	$j=8$ $y_8=B$
$\oslash$	nil 0,1	nil 0,1	nil 0,1	nil 0,1	nil 0,1	nil 0,1	nil 0,1	nil 0,1	nil 0,1
A	nil 0,1	$\nwarrow$ 1,1	$\nwarrow$ $\leftarrow$ 1,2	$\nwarrow$ $\leftarrow$ 1,3	$\nwarrow$ $\leftarrow$ 1,4	$\leftarrow$ 1,4	$\leftarrow$ 1,4	$\leftarrow$ 1,4	$\leftarrow$ 1,4
B	nil 0,1	$\uparrow$ 1,1	$\uparrow$ $\leftarrow$ 1,2	$\uparrow$ $\leftarrow$ 1,3	$\uparrow$ $\leftarrow$ 1,4	$\nwarrow$ 2,4	$\nwarrow$ $\leftarrow$ 2,8	$\nwarrow$ $\leftarrow$ 2,12	$\nwarrow$ $\leftarrow$ 2,16
A	nil 0,1	$\nwarrow\uparrow$ 1,2	$\nwarrow$ 2,1	$\nwarrow$ $\leftarrow$ 2,3	$\nwarrow$ $\leftarrow$ 2,6	$\uparrow$ $\leftarrow$ 2,10	$\uparrow$ $\leftarrow$ 2,14	$\uparrow$ $\leftarrow$ 2,18	$\uparrow$ $\leftarrow$ 2,22
B	nil 0,1	$\uparrow$ 1,2	$\uparrow$ 2,1	$\uparrow$ $\leftarrow$ 2,3	$\uparrow$ $\leftarrow$ 2,6	$\nwarrow$ 3,6	$\nwarrow$ $\leftarrow$ 3,16	$\nwarrow$ $\leftarrow$ 3,30	$\nwarrow$ $\leftarrow$ 3,48
A	nil 0,1	$\nwarrow\uparrow$ 1,3	$\nwarrow\uparrow$ 2,3	$\nwarrow$ 3,1	$\nwarrow$ $\leftarrow$ 3,4	$\uparrow$ $\leftarrow$ 3,10	$\uparrow$ $\leftarrow$ 3,20	$\uparrow$ $\leftarrow$ 3,34	$\uparrow$ $\leftarrow$ 3,52
B	nil 0,1	$\uparrow$ 1,3	$\uparrow$ 2,3	$\uparrow$ 3,1	$\uparrow$ $\leftarrow$ 3,4	$\nwarrow$ 4,4	$\nwarrow$ $\leftarrow$ 4,14	$\nwarrow$ $\leftarrow$ 4,34	$\nwarrow$ $\leftarrow$ 4,68

y the question: Circle the table entires that were used to calculate $N[6,8] = 68$, $N[5,6] = 16$, $N[4,4] = 6$, and $N[2,2] = 2$.