Iterative vs. Memoized LCS-LENGTH

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September 14, 2008

Iterative LCS-Length (figure 1), whose complexity is asymptotically equivalent, performs more calculations than memoized LCS-Length (figure 2).

0	1	0	1	1	0	1	1	0
0	1	1	1	1	1	1	1	1
1	1	2	2	2	2	2	2	2
1	1	2	2	2	3	3	3	3
1	2	2	3	3	3	4	4	4
1	2	3	3	3	4	4	4	5
1	2	3	4	4	4	5	5	5
1	2	3	4	4	5	5	5	6
1	2	3	4	5	5	6	6	6
	0 1 1 1 1 1 1	0 1 1 1 1 1 1 2 1 2 1 2 1 2	0 1 1 1 1 2 1 1 2 1 2 2 1 2 3 1 2 3 1 2 3	0 1 1 1 1 1 2 2 1 1 2 2 1 2 2 3 1 2 3 3 1 2 3 4 1 2 3 4	0 1 1 1 1 1 1 2 2 2 1 1 2 2 2 1 2 2 3 3 1 2 3 3 3 1 2 3 4 4 1 2 3 4 4	0 1 1 1 1 1 1 1 2 2 2 2 1 1 2 2 2 3 1 2 2 3 3 3 1 2 3 3 4 4 1 2 3 4 4 4 1 2 3 4 4 5	0 1 1 1 1 1 1 1 1 2 2 2 2 2 1 1 2 2 2 2 3 1 2 2 3 3 3 4 1 2 3 3 4 4 1 2 3 4 4 4 1 2 3 4 4 5 1 2 3 4 4 5 5	1 1 2 2 2 3 3 3 1 2 2 3 3 3 4 4 1 2 3 3 3 4 4 4 1 2 3 4 4 4 5 5 1 2 3 4 4 5 5 5

Figure 1: Paths calculated by iterative LCS-LENGTH

i, j	0	1	0	1	1	0	1	1	0
1		1		1	1				
0	1	1	2	2	2				
0	1		2	2		3			
1		2		3	3		4		
0			3	3		4	4		
1					4		5	5	
0						5	5		6
1								6	6

Figure 2: Paths calculated by memoized LCS-LENGTH