Semi-global alignment

Traditional dynamic programming table

		0	1	2	3	4	5	6	7	8	9
M	–	A	G	G	T	A	T	C	G	C	
0	–	0	0	0	0	0	0	0	0	0	0
1	A	1	0	1	1	1	0	1	1	1	1
2	T	2	1	1	2	1	1	0	1	2	2
3	G	3	2	1	1	2	2	1	1	1	2
4	G	4	3	2	1	2	3	2	2	1	2
5	C	5	4	3	2	2	3	3	2	2	1

$d = 2$

Alternate dynamic programming table

							d					
	c	-3	-2	-1	0	1	2	3	4	5	6	7
	-1			$-\infty$	-1	0	1	2	3	4	5	6
	0		$-\infty$	-1	1	1	2	3	6	5	6	
e	1	$-\infty$	-1	3	3	2	4	6	9	8		
	2	-1	3	4	4	4	7	8	9			

$C(e,d)$ = last column in **M** on d-diagonal that contains e edits.

$C(1,2) = 1$