Mark Decello

Hand Trace: n = 5, k = 5

i	j	i <= n	j <= min(i, k)	j == 0 or i == j	$B[i, j] = B_{i-1, j-1} + B_{i-1, j}$	
0	0	Yes	0 <= min(0, 5) Yes	Yes		$B_{00} = 1$
0	1	Yes	1 <= min(0, 5) No	No		
1	0	Yes	0 <= min(1, 5) Yes	Yes		$B_{10} = 1$
1	1	Yes	1 <= min(1, 5) Yes	Yes		$B_{11} = 1$
1	2	Yes	2 <= min(1, 5) No	No		
2	0	Yes	0 <= min(2, 5) Yes	Yes		$B_{20} = 1$
2	1	Yes	1 <= min(2, 5) Yes	No	$B_{21} = B_{10} + B_{11}$ $B_{21} = 1 + 1 = 2$	$B_{21} = 2$
2	2	Yes	2 <= min(2, 5) Yes	Yes		$B_{22} = 1$
2	3	Yes	3 <= min(2, 5) No	No		
3	0	Yes	0 <= min(3, 5) Yes	Yes		$B_{30} = 1$
3	1	Yes	1 <= min(3, 5) Yes	No	$B_{31} = B_{20} + B_{21}$ $B_{31} = 1 + 2 = 3$	$B_{31} = 3$
3	2	Yes	2 <= min(3, 5) Yes	No	$B_{32} = B_{21} + B_{22}$ $B_{32} = 2 + 1 = 3$	$B_{32} = 3$
3	3	Yes	3 <= min(3, 5) Yes	Yes		$B_{33} = 1$
3	4	Yes	4 <= min(3, 5) No	No		
4	0	Yes	0 <= min(4, 5) Yes	Yes		$B_{40} = 1$
4	1	Yes	1 <= min(4, 5) Yes	No	$B_{41} = B_{30} + B_{31}$ $B_{41} = 1 + 3 = 4$	$B_{41} = 4$
4	2	Yes	2 <= min(4, 5) Yes	No	$B_{42} = B_{31} + B_{32}$ $B_{42} = 3 + 3 = 6$	$B_{42} = 6$
4	3	Yes	4 <= min(4, 5) Yes	No	$B_{43} = B_{32} + B_{33}$ $B_{43} = 3 + 1 = 4$	$B_{43} = 4$
4	4	Yes	4 <= min(4, 5) Yes	Yes		$B_{44} = 1$
4	5	Yes	5 <= min(4, 5) No	No		

i	j	i <= n	j <= min(i, k)	j == 0 or i == j	$B[i, j] = B_{i-1, j-1} + B_{i-1, j}$	
5	0	Yes	0 <= min(5, 5) Yes	Yes		$B_{50} = 1$
5	1	Yes	1 <= min(5, 5) Yes	No	$B_{51} = B_{40} + B_{41}$ $B_{51} = 1 + 4 = 5$	$B_{51} = 5$
5	2	Yes	2 <= min(5, 5) Yes	No	$B_{52} = B_{41} + B_{42}$ $B_{52} = 4 + 6 = 10$	$B_{52} = 10$
5	3	Yes	3 <= min(5, 5) Yes	No	$B_{53} = B_{42} + B_{43}$ $B_{53} = 6 + 4 = 10$	$B_{53} = 10$
5	4	Yes	4 <= min(5, 5) Yes	No	$B_{54} = B_{43} + B_{44}$ $B_{54} = 4 + 1 = 5$	$B_{54} = 5$
5	5	Yes	5 <= min(5, 5) Yes	Yes		$B_{55} = 1$
5	6	Yes	6 <= min(5, 5) No	No		
6	0	No				