

$a(n)$ in binary	$a(n)$	$n$
0	0	0
1	1 ✓	1
10	2 ✓	2
100	4 ✓	3
1000	8 ✓	4
0011	3 ✓	5
10000	16 ✓	6
100000	32 ✓	7
1000000	64 ✓	8
0001100	12	9
100000000	128	10
10000000000	256	11
100000000000	512	12
0000010001	17	13
1000000000000	1024	14
00000100010	34	15
100000000000000	2048	16
1000000000000000	4096	17
10000000000000000	8192	18

This  $a(k)$  controls  $a(2k-1), a(2k-2)$  →