

Binary Polynomial & 4 x 4 Matrix

Exponent	2 ⁰	2 ¹	2 ²	2 ³	2 ⁴
N	1	2	4	8	16
1	1				
2		2			
3	3	3			
4			4		
5	5		5		
6		6	6		
7	7	7	7		
8				8	
9	9			9	
10		10		10	
11	11	11		11	
12			12	12	
13	13		13	13	
14		14	14	14	
15	15	15	15	15	
16					16
17	17				17
18		18			18
19	19	19			19
20			20		20
21	21		21		21
22		22	22		22
23	23	23	23		23
24				24	24
25	25			25	25
26		26		26	26
27	27	27		27	27
28			28	28	28
29	29		29	29	29
30		30	30	30	30
31	31	31	31	31	31
Count	16	16	16	16	16

$$N = a_0 2^0 + a_1 2^1 + a_2 2^2 + a_3 2^3 + a_4 2^4 + \dots$$