DÚ 14 (7/2)

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BIKS

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$a = \{0, 1, 1, 2, 1, 1, 2, 3\}$

$b = \{1, 2, 2, 3, 3, 2, 1, 2\}$

LIN. KONVOLÚCIA

a	0	1	1	2	1	1	2	3
$*b$	1	2	2	3	3	2	1	2
	0	2	2	4	2	2	4	6
	0	1	1	2	1	1	2	3
	0	2	2	4	2	2	4	6
	0	3	3	6	3	3	6	9
	0	3	3	6	3	3	6	9
	0	2	2	4	2	2	4	6
	0	2	2	4	2	2	4	6
	0	1	1	2	1	1	2	3

každý prvok b násobím s každým prvkom a, posun o "10"-prvok vpravo

0	0	1	3	6	10	13	17	21	23	21	22	16	10	7	6

$|N|$ postupnosti = 15, musím zaručiť postupnosť na 2^n

doplníme 0 pred postupnosť $|N| = 16 = 2^4$

zrkadlové otočenie postupnosti

$c = \{6, 7, 10, 16, 22, 21, 23, 21, 17, 13, 10, 6, 3, 1, 0, 0\}$

$c_0 = 6$ $c_9 = 13$

$c_1 = 7$ $c_{10} = 10$

$c_2 = 10$ $c_{11} = 6$

$c_3 = 16$ $c_{12} = 3$

$c_4 = 22$ $c_{13} = 1$

$c_5 = 21$ $c_{14} = 0$

$c_6 = 23$ $c_{15} = 0$

$c_7 = 21$

$c_8 = 17$

KRUHOVÁ KONVOLÚCIA

$N = 8$ $CC_n = C_n + C_{n+N} \pmod{337}$

$CC_0 = C_0 + C_8 = 6 + 17 = 23 \pmod{337}$

$CC_1 = C_1 + C_9 = 7 + 13 = 20 \pmod{337}$

$CC_2 = C_2 + C_{10} = 10 + 10 = 20 \pmod{337}$

$CC_3 = C_3 + C_{11} = 16 + 6 = 22 \pmod{337}$

$CC_4 = C_4 + C_{12} = 22 + 3 = 25 \pmod{337}$

$CC_5 = C_5 + C_{13} = 21 + 1 = 22 \pmod{337}$

$CC_6 = C_6 + C_{14} = 23 + 0 = 23 \pmod{337}$

$CC_7 = C_7 + C_{15} = 21 + 0 = 21 \pmod{337}$

$$CC = \{23, 20, 20, 22, 25, 22, 23, 21\} \pmod{337}$$