LFSR testing WriteTEXRunFSR(output, lfsr, ist, 5, strGen, gen):

step num	state $\mathcal{S}_2$	$\mathcal{S}_1$	$\mathcal{S}_0$	sequence $\mathcal{S}_0$
0	0000	1000	0011	0011
1	0101	0000	1000	1000
2	0100	0101	0000	0000
3	0101	0100	0101	0101
4	0111	0101	0100	0100

Table 1: LFSR with feedback $y^3 + y + \alpha^3$ over $\mathbb{F}_{2^4}$ with basis $\mathrm{B} = [\beta_i] = [\ \alpha^3, \alpha^6, \alpha^{12}, \alpha^9$ $]$ where $\alpha = \omega^1 + \omega^3$ and ω is a root of $x^4 + x^3 + x^2 + x + 1$.

The whole sequence: $0011, 1000, 0000, 0101, 0100$

LFSR testing WriteTEXRunFSRByGenerator(output, lfsr, ist, 5, strGen, gen):

step num	state $\mathcal{S}_2$	$\mathcal{S}_1$	$\mathcal{S}_0$	sequence $\mathcal{S}_0$
0	0	α^3	α^8	α^8
1	α^5	0	α^3	α^3
2	α^6	α^5	0	0
3	α^5	α^6	α^5	α^5
4	α^{14}	α^5	α^6	α^6

Table 2: LFSR with feedback $y^3 + y + \alpha^3$ over $\mathbb{F}_{2^4}$ where generator where $\alpha = \omega^1 + \omega^3$ and ω is a root of $x^4 + x^3 + x^2 + x + 1$.

The whole sequence: $\alpha^8, \alpha^3, 0, \alpha^5, \alpha^6$