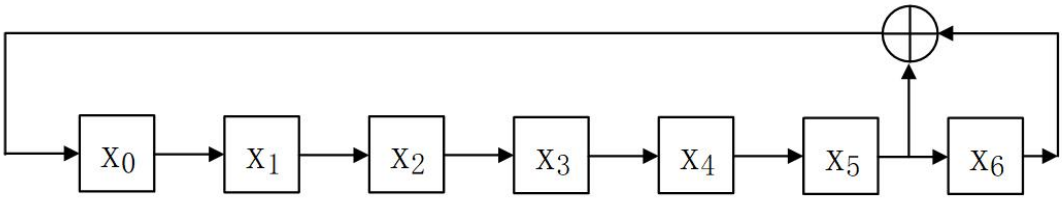
以 PRBS7(w16)为例，生成多项式为 G(x)= x^7+x^6+1



$$\begin{bmatrix} X(t+1)_0 \\ X(t+1)_1 \\ X(t+1)_2 \\ X(t+1)_3 \\ X(t+1)_4 \\ X(t+1)_5 \\ X(t+1)_6 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} \cdot \begin{bmatrix} X(t)_0 \\ X(t)_1 \\ X(t)_2 \\ X(t)_3 \\ X(t)_4 \\ X(t)_5 \\ X(t)_6 \end{bmatrix}$$

则：

$$\begin{bmatrix} X(t+16)_0 \\ X(t+16)_1 \\ X(t+16)_2 \\ X(t+16)_3 \\ X(t+16)_4 \\ X(t+16)_5 \\ X(t+16)_6 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{bmatrix}^{16} \cdot \begin{bmatrix} X(t)_0 \\ X(t)_1 \\ X(t)_2 \\ X(t)_3 \\ X(t)_4 \\ X(t)_5 \\ X(t)_6 \end{bmatrix}$$