$$f(x) = f_0 + f_1x + f_2x^2 + f_3x^3 + f_4x^4 + f_5x^5 + f_6x^6 + f_7x^7$$

$$\begin{aligned} g(x) = f(x+1) &= f_0 + f_1(x+1) + f_2(x+1)^2 + f_3(x+1)^3 + f_4(x+1)^4 + f_5(x+1)^5 + f_6(x+1)^6 + f_7(x+1)^7 \\ &= f_0 + f_1(x+1) + f_2(x+1)^2 + f_3(x+1)^3 + (x+1)^4\left[f_4 + f_5(x+1) + f_6(x+1)^2 + f_7(x+1)^3\right] \\ &= f_0 + f_1(x+1) + (x+1)^2\left[f_2 + f_3(x+1)\right] + (x+1)^4\left[f_4 + f_5(x+1) + (x+1)^2\left[f_6 + f_7(x+1)\right]\right] \end{aligned}$$

$deg(f) = deg(g) = 7$

$n = 8 = 2^3$

$e = 3$

$f_0 + f_1(x+1) + f_2(x+1)^2 + f_3(x+1)^3$

$f_4 + f_5(x+1) + f_6(x+1)^2 + f_7(x+1)^3$

$(x+1)^4\left[f_4 + f_5(x+1) + f_6(x+1)^2 + f_7(x+1)^3\right]$

$f_0 + f_1(x+1)$

$f_2 + f_3(x+1)$

$f_4 + f_5(x+1)$

$f_6 + f_7(x+1)$

$(x+1)^2\left[f_2 + f_3(x+1)\right]$

$(x+1)^2\left[f_6 + f_7(x+1)\right]$

f_0

$(x+1)f_1$

f_2

$(x+1)f_3$

f_4

$(x+1)f_5$

f_6

$(x+1)f_7$

f_1

f_3

f_5

f_7