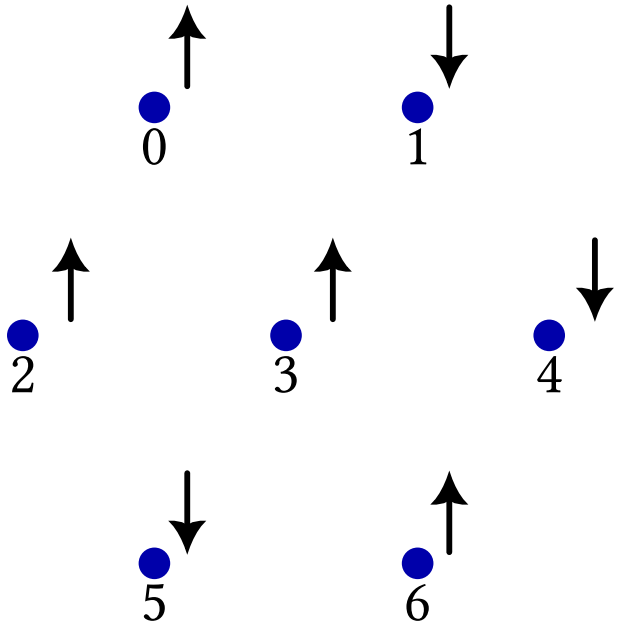

$$s_{input} = (s_0, s_1, s_2, s_3, s_4, s_5, s_6) = (1, 0, 1, 1, 0, 0, 1)$$

$$s'_{duplicate\_spread} = \begin{pmatrix} s_0 \\ s_1 \\ s_2 \\ s_3 \\ s_4 \\ s_5 \\ s_6 \end{pmatrix}$$

$$s'_{duplicate\_nn} = \begin{pmatrix} s_0, & s_1, s_2, s_3, -, -, - \\ s_1, & s_0, s_3, s_4, -, -, - \\ s_2, & s_0, s_3, s_5, -, -, - \\ s_3, & s_0, s_1, s_2, s_4, s_5, s_6 \\ s_4, & s_1, s_3, s_6, -, -, - \\ s_5, & s_2, s_3, s_6, -, -, - \\ s_6, & s_3, s_4, s_5, -, -, - \end{pmatrix}$$

$$s'_{duplicate\_nnn} = \begin{pmatrix} s_0, & s_1, s_2, s_3, -, -, - & , s_4, s_5 \\ s_1, & s_0, s_3, s_4, -, -, - & , s_2, s_6 \\ s_2, & s_0, s_3, s_5, -, -, - & , s_1, s_6 \\ s_3, & s_0, s_1, s_2, s_4, s_5, s_6 & , -, - \\ s_4, & s_1, s_3, s_6, -, -, - & , s_0, s_5 \\ s_5, & s_2, s_3, s_6, -, -, - & , s_0, s_4 \\ s_6, & s_3, s_4, s_5, -, -, - & , s_1, s_2 \end{pmatrix}$$