

$$F_n = F_{n-1} + F_{n-2}$$

$$F_{n-1} = F_{n-1} + 0$$

$$\left. \begin{array}{l} F_n = F_{n-1} + F_{n-2} \\ F_{n-1} = F_{n-1} + 0 \end{array} \right\} \begin{bmatrix} F_n \\ F_{n-1} \end{bmatrix} = \begin{bmatrix} 1 & 1 \\ 1 & 0 \end{bmatrix} \begin{bmatrix} F_{n-1} \\ F_{n-2} \end{bmatrix}$$