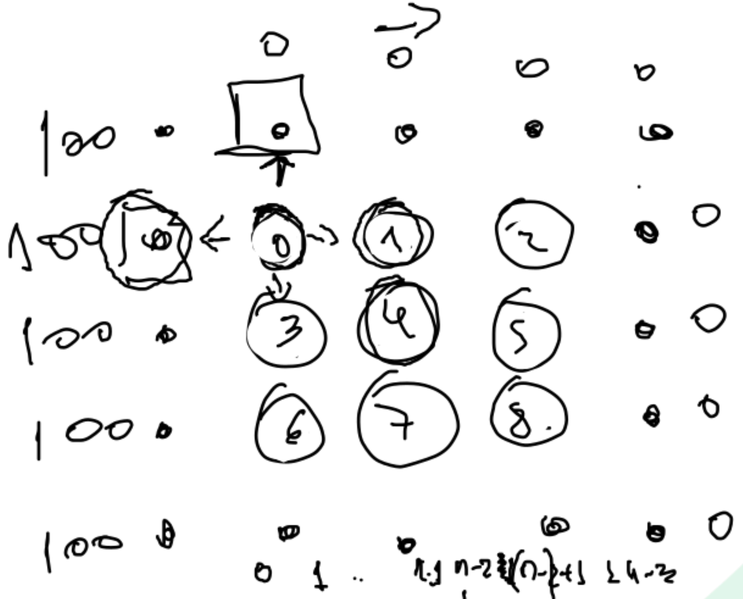

$$\begin{bmatrix} 4 & -1 & 0 & \cdots & -1 & 0 \\ -1 & 4 & -1 & \cdots & 0 & -1 & 0 \\ & & & \vdots & & & \\ 0 & -1 & \cdots & -1 & 4 & -1 & \cdots & -1 \\ & & & & & & & \end{bmatrix} \begin{matrix} u_{00} \\ u_{01} \\ u_{02} \\ \\ u_{10} \end{matrix}$$

$k: \{1, \cdots, (n-2)^2\}$ (0 → $(n-2)^2 - 1$)

$b = [0, \cdots, 0]$

$4u_{ij} - u_{i-1j} - u_{i+1i} - u_{ij-1} - u_{ij+1}$

$k = (n-2)i + j$

$i = k // (n-2)$

$j = k \,\%\, (n-2)$

$i, j = 0 \quad b[(n-2)k] = 100$

$(i, j) \rightarrow (k, k)$

$k + (n-2) \quad n-1 + n-2 = 2n-3$

$k - (n-2) \quad n-1 - (n-2) = 1$