

$$\left[\begin{array}{cccccccc|c}
 A_{11} & A_{12} & A_{13} & \cdots & A_{1k} & \cdots & A_{1j} & \cdots & A_{1n} & b_1 \\
 0 & A_{22} & A_{23} & \cdots & A_{2k} & \cdots & A_{2j} & \cdots & A_{2n} & b_2 \\
 0 & 0 & A_{33} & \cdots & A_{3k} & \cdots & A_{3j} & \cdots & A_{3n} & b_3 \\
 \vdots & \vdots & \vdots & & \vdots & & \vdots & & \vdots & \vdots \\
 0 & 0 & 0 & \cdots & A_{kk} & \cdots & A_{kj} & \cdots & A_{kn} & b_k \\
 \hline
 \vdots & \vdots & \vdots & & \vdots & & \vdots & & \vdots & \vdots \\
 0 & 0 & 0 & \cdots & A_{ik} & \cdots & A_{ij} & \cdots & A_{in} & b_i \\
 \vdots & \vdots & \vdots & & \vdots & & \vdots & & \vdots & \vdots \\
 0 & 0 & 0 & \cdots & A_{nk} & \cdots & A_{nj} & \cdots & A_{nn} & b_n
 \end{array} \right]$$

\leftarrow pivot row
 \leftarrow row being transformed