

$$\begin{array}{c}
 \begin{array}{cc}
 & j\text{-th} & & i\text{-th} & & \\
 & \vdots & & \vdots & &
 \end{array} \\
 \left[\begin{array}{cccccc}
 1 & 0 & 0 & 0 & \dots & 0 \\
 0 & 1 & 0 & 0 & \dots & 0 \\
 & \vdots & & \vdots & & \\
 i\text{-th} & \dots & c & \dots & 1 & \dots & 0 \\
 & \vdots & & \vdots & & \\
 0 & 0 & \dots & 0 & 0 & 1
 \end{array} \right] \\
 \begin{array}{c}
 E \\
 r_i + cr_j
 \end{array}
 \end{array}$$