

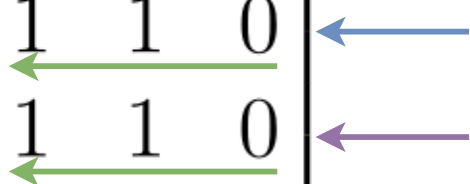
$$X^T = \begin{bmatrix} 0 & 1 & 0 & 0 \\ \underline{0} & 1 & 1 & 0 \\ \underline{1} & 1 & 1 & 0 \\ 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 \end{bmatrix}$$


Diagram illustrating row operations on the matrix X^T . The matrix is shown with its first column entries in the second and third rows underlined in red. A blue arrow points to the second row, and a purple arrow points to the third row. Green arrows point from the second and third rows to the first column, indicating the elimination of the first column entries in those rows.