Row-major order $\begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{22} \end{bmatrix}$

 $\begin{bmatrix} a_{31} & a_{32} & a_{33} \\ a_{31} & a_{32} & a_{33} \end{bmatrix}$ Column-major order

 $\begin{bmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{bmatrix}$