

$$\tau_m := \begin{pmatrix} 0 & 0 & \dots & 0 & 01 & 0 & \dots \\ 0 & 0\dots & \dots & \dots & \dots & \dots 1 & 1 \\ \dots & 0 & 01 & 1 & \dots & 1 & 0 \end{pmatrix}.$$