





 Scalar Matrix: A diagonal matrix whose all diagonal elements are equal is called scalar matrix

$$A = [a_{ij}]_n$$
 is a scalar matrix if

+

$$a_{ij} = 0$$
,  $\forall i \neq j$   $a_{ij} = k$ ,  $\forall i = j$ 

Example:

$$A = \begin{pmatrix} a & 0 \\ 0 & a \end{pmatrix}$$