

Types of Matrix:



• Row Matrix (row vector): A matrix having a single row is called a row matrix.

$$A = [a_{ij}]_{1 \times n} = [a_{11} \quad a_{12} \quad a_{13} \cdots a_{1n}]_{1 \times n}$$

Example:
$$B = [a \ b \ c]_{1\times 3}$$

 Column Matrix (column vector): A matrix having a single column is called a column matrix.

Example:
$$B = \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix}_{4 \times 1}$$

$$A = \begin{bmatrix} a_{ij} \end{bmatrix}_{m \times 1} = \begin{bmatrix} a_{11} \\ a_{21} \\ \vdots \\ a_{m1} \end{bmatrix}_{m \times 1}$$

Matrices consisting of one row or one column are called vectors.