Types of Matrix:

- Triangular Matrix :

  (ii) Lower Triangular Matrix

  A matrix in which all the elements above the principal diagonal are zero is called a lower triangular matrix

  $P = [a_{ij}]_n$ such that $a_{ij} = 0, \forall\, i < j$

  Example:

  $$A = \begin{pmatrix} -7 & 0 & 0 \\ 3 & 4 & 0 \\ -2 & 10 & 0 \end{pmatrix} \qquad B = \begin{pmatrix} -1 & 0 & 0 & 0 \\ 0 & 4 & 0 & 0 \\ -3 & 8 & 6 & 0 \end{pmatrix}$$