

Let A be a matrix, its transposed A^t is obtained by swapping rows with columns. Let's see an example:

Consider matrix:

$$A = \begin{pmatrix} 5 & 1 & 2 \\ -3 & 0 & 1 \\ 4 & -5 & 2 \\ 1 & 0 & 4 \end{pmatrix}$$

Its transpose will be:

$$A^t = \begin{pmatrix} 5 & -3 & 4 & 1 \\ 1 & 0 & -5 & 0 \\ 2 & 1 & 2 & 4 \end{pmatrix}$$

The first column in matrix A has become the first row in matrix A^t , the second column in matrix A has become the second row in matrix A^t ...