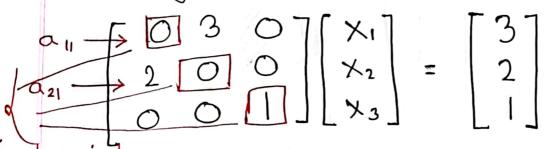
Pivoting



If we try to solve this linear system using Gaussian Elimination/LU Decomposition, there will be an issue.

When we try to find the row multiplier for R2,

m 21 = \frac{a21}{a11} = \frac{2}{0} = undefinied.

We cannot have undefined value for row multipliers. In order to solve this issue, we need to apply pivoting. We can either swap the rows/columns.

** The pivot points cannot be zero.

For our given example, we can swap the rows (R18R2)

Now, we can apply Gaussian Elimination/ LU Decomposition