There are multiple ways to implement pivoting when solving systems of linear equations. Methods include no pivoting (when no pivoting is implemented), trivial pivoting (when row “i” is swapped with another arbitrary row when ai,i=0), and partial pivoting (when row “i” is swapped with another row “p” with the largest value for ap,i). There also exists “total pivoting”, which involves swapping rows and columns to achieve an ideal non-zero value for ai,i.

<http://mathfaculty.fullerton.edu/mathews/n2003/PivotingMod.html>

<http://ijear.org/vol4spl2/7-Ashu-Vij.pdf>

<https://www.math.ust.hk/~mamu/courses/231/Slides/CH06_2A.pdf>