

Algorithm: Gauss Jordan Method

- Read number of equations say n

// Read equation

- For $i = 0$ to $(n - 1)$ in steps of 1 do
 - For $j = 0$ to n in steps of 1 do
 - Read $a[i][j]$End for
- End for

// formation of diagonal matrix

- For $k = 0$ to $(n - 1)$ in steps of 1 do
 - For $i = 0$ to $(n - 1)$ in steps of 1 do
 - $u = \frac{a[i][k]}{a[k][k]}$
 - If $(i \neq k)$ then
 - For $j = k$ to n in steps of 1 do
 - $a[i][j] = a[i][j] - (a[k][j] * u)$End forEnd if
- End forEnd for

// Calculate values

- For $i = 0$ to $(n-1)$ in steps of 1 do
 - $X[i] = \frac{a[i][n]}{a[i][i]}$End for
- END