```
a: diagonal above main diagonal
b: principal diagonal
a: diagonal down the main diagonal
b: constant vector
        Input: vector a, vetor b, vector c, vector d
begin\ gaussian Tridiagonal Matrix Method:
        n = size(d)
        matrix = matrix_zeros(n,n)
        for i to (n-1):
        m = a[i]/b[i]

    \text{matrix}[i+1][i+1] = b[i+1] = b[i+1] - (m*c[i])

        matrix[i][i+1] = c[i]
        d[i+1] = d[i+1] - (m*d[i])
    end
    matrix
end
```