

`matrix_function.soltion`: Method in `matrix_function` that
do a progressive or backward substitutionv to find an array

Input: matrix A, array b, int size

Output: solution vector results

begin doolittle

L = identityMatrix(size)

U = identityMatrix(size)

int count <- 0

while (count < size) do

 int count2 <- count

 while (count2 < size) do

 float sum <- 0

 int count3 <- 0

 while (count3 < count) do

 sum <- sum + (L[count][count3]*U[count3][count2])

 end while

 U[count][count2] <- A[count][count2]-sum

 while (count2 < size) do

 if (count == count2):

 L[conut][count] <- 1

 else:

 sum <- 0

 while (count3 < count) do

 sum <- sum + (L[count2][count3]*

 U[count3][count])

 end while

 L[count2][count] <- ((A[count2][count]-sum)/

 U[count][count])

z = array(matrix_function.soltion(L,b))

x = matrix_function.soltion(U,z)

array sol

int count <- 0

while (count < size(x)) do

 sol[count] <- x[i]

return sol

end doolittle