'CHECK IF LU = PA IS SATISFIED'

TAKE OUTPUT

A.

P

$\begin{bmatrix} & \\ & \end{bmatrix}$ COMES FROM

ALONG W/ b

COMPUTE X

FROM $Ax = b$

READ @

$Ax = b$

$A = \begin{bmatrix} -5 & 2 & -1 \\ 3 & 1 & 6 \\ 1 & 0 & 3 \end{bmatrix}$

I WAS DETERMINING WHAT MY OLD CODE FOR SOLVING UPPER-TRI / BOTTOM-TRI .... SUCKS!

$M_1 A = \begin{bmatrix} 1 & 0 & 0 \\ 3/5 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} -5 & 2 & -1 \\ 3 & 1 & 6 \\ 1 & 0 & 3 \end{bmatrix} = \begin{bmatrix} -5 & 2 & -1 \\ 0 & 11/5 & 23/5 \\ 1 & 0 & 3 \end{bmatrix}$ = = NOW PA

$PA = LU$ ...

LOOK @ (PA[0,0] .

$M[i+1,0] = \frac{3}{5} = -\frac{PA[1,0]}{PA[0,0]} \rightarrow M[i+1,0] = -\frac{PA[i+1,0]}{PA[i,0]}$

$i = 1 \rightarrow M[2,0] = -\frac{PA[2,0]}{PA[1,0]} = -\frac{(1)}{(0)}$ = NaN ... FUCK