

NAME

milu0 - MILU(0) preconditioning

CALLING SEQUENCE

[L,U,ierr]=milu0(A)

PARAMETERS

A : sparse matrix (must be square)
L : lower triangular sparse matrix
U : upper triangular sparse matrix
ierr : error flag

DESCRIPTION

Builds an incomplete LU factorization of the sparse matrix **A**. The two factors **L** and **U** are stored in the internal CSR format. The CSR format is the Compressed Sparse Row format used by Scilab.

ierr : error flag

0 --> normal return

k --> code stoped on a zero pivot at step k.

EXAMPLE

```
A=mmread(SCILIN+'tests/matrices/nos3.mtx')
n=size(A,1); b=ones(n,1);
[L,U,ierr]=milu0(spa)
x=U\ (L\b)
A*x-b
```

AUTHOR

Sparskit procedure interfaced by Aladin Group

SEE ALSO

ilu0, iluk, ilut, ilud, ilutp, iludp