NAME

USETUP – CUTEr tool to set up the data structures for unconstrained minimization.

SYNOPSIS

CALL USETUP(INPUT, IOUT, N, X, BL, BU, NMAX)

DESCRIPTION

The USETUP subroutine sets up the correct data structures for subsequent computations in the case where the only possible constraints are bound constraints.

ARGUMENTS

The arguments of USETUP are as follows

INPUT [in] - integer
the unit number for the decoded data; the unit from which OUTSDIF.d is read,

IOUT [in] - integer
the unit number for any error messages,

N [out] - integer
the number of variables for the problem,

X [out] - real/double precision
an array which gives the initial estimate of the solution of the problem,

BL [out] - real/double precision
an array which gives lower bounds on the variables,

BU [out] - real/double precision
an array which gives upper bounds on the variables,

NMAX [in] - integer
the actual declared dimension of X, BL and BU.

APPLICATION USAGE

A call to USETUP must precede calls to other evaluation tools for unconstrained and bound constrained problems.

AUTHORS

I. Bongartz, A.R. Conn, N.I.M. Gould, D. Orban and Ph.L. Toint

SEE ALSO

CUTEr (and SifDec): A Constrained and Unconstrained Testing Environment, revisited,
N.I.M. Gould, D. Orban and Ph.L. Toint,
ACM TOMS, **29**:4, pp.373-394, 2003.

CUTE: Constrained and Unconstrained Testing Environment, I. Bongartz, A.R. Conn, N.I.M. Gould and Ph.L. Toint, TOMS, **21**:1, pp.123-160, 1995.

csetup(3M).