NAME

CUTEST_udimsh − CUTEst tool to determine the number of nonzeros required to store the sparse Hessian matrix in coordinate format.

SYNOPSIS

CALL CUTEST_udimsh(status, nnzh)

DESCRIPTION

The CUTEST_udimsh subroutine determine the number of nonzeros required to store the Hessian matrix of the objective function of the problem decoded from a SIF file by the script *sifdecoder* at the point X. This Hessian matrix is stored as a sparse matrix in coordinate format.

The problem under consideration is to minimize or maximize an objective function $f(x)$ over all $x \in R^n$ subject to the simple bounds $x^l \leq x \leq x^u$. The objective function is group-partially separable.

ARGUMENTS

The arguments of CUTEST_udimsh are as follows

status [out] - integer
: the outputr status: 0 for a succesful call, 1 for an array allocation/deallocation error, 2 for an array bound error, 3 for an evaluation error,

nnzh [out] - integer
: the number of nonzero elements in the matrix.

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.

cutest_cdimsh(3M), sifdecoder(1).

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