NAME

CUTEST_cdimen – CUTEst tool to get the number of variables and constraints involved.

SYNOPSIS

CALL CUTEST_cdimen(status, input, n, m)

DESCRIPTION

The CUTEST_cdimen subroutine discovers how many variables and constraints are involved in the problem decoded from a SIF file by the script *sifdecode*.

The problem under consideration is to minimize or maximize an objective function $f(x)$ over all $x \in R^n$ subject to general equations $c_i(x) = 0$, $(i \in 1, \ldots, m_E)$, general inequalities $c_i^l(x) \leq c_i(x) \leq c_i^u(x)$, $(i \in m_E + 1, \ldots, m)$, and simple bounds $x^l \leq x \leq x^u$. The objective function is group-partially separable and all constraint functions are partially separable.

ARGUMENTS

The arguments of CUTEST_cdimen 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,

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

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

m [out] - integer
the total number of general constraints.

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_udimen(3M), sifdecode(1).

NAME

    CUTEST_cdimen – CUTEst tool to get the number of variables and constraints involved.

SYNOPSIS

    CALL CUTEST_cdimen(status, input, n, m)

DESCRIPTION

    The CUTEST_cdimen subroutine discovers how many variables and constraints are involved in the problem decoded from a SIF file by the script *sifdecode*.

    The problem under consideration is to minimize or maximize an objective function $f(x)$ over all $x \in R^n$ subject to general equations $c_i(x) = 0$, $(i \in 1, \ldots, m_E)$, general inequalities $c_i^l(x) \le c_i(x) \le c_i^u(x)$, $(i \in m_E + 1, \ldots, m)$, and simple bounds $x^l \le x \le x^{u.}$ The objective function is group-partially separable and all constraint functions are partially separable.

ARGUMENTS

    The arguments of CUTEST_cdimen 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,

    input [in] - integer

        the unit number for the decoded data; the unit from which OUTSDIF.d is read,

    n [out] - integer

        the number of variables for the problem,

    m [out] - integer

        the total number of general constraints.

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_udimen(3M), sifdecode(1).