## **NAME**

CUTEST\_probname – CUTEst tool to obtain the name of the problem.

## **SYNOPSIS**

CALL CUTEST\_probname( status, pname )

## DESCRIPTION

The CUTEST\_probname subroutine obtains the name of the problem.

The problem under consideration is to minimize or maximize an objective function f(x) over all  $x \in \mathbb{R}^n$  subject to general equations  $c_i(x) = 0$ ,  $(i \in 1, ..., m_E)$ , general inequalities  $c_i^l(x) \le c_i(x) \le c_i^u(x)$ ,  $(i \in m_E + 1, ..., m)$ , 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\_probname are as follows

status [out] - integer

the output status: 0 for a successful call, 1 for an array allocation/deallocation error, 2 for an array bound error, 3 for an evaluation error.

pname [out] - character

a 10-character string containing the name of the problem.

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# **SEE ALSO**

CUTEst: a Constrained and Unconstrained Testing Environment with safe threads,

N.I.M. Gould, D. Orban and Ph.L. Toint,

Technical Report, Rutherford Appleton Laboratory, 2013.

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, ACM TOMS, 21:1, pp.123-160, 1995.

 $cutest\_pname(3M), \quad cutest\_unames(3M), \quad cutest\_cnames(3M), \quad cutest\_cnames(3M), \quad cutest\_varnames(3M).$