## **NAME**

UGR - CUTEr tool to evaluate gradient.

## **SYNOPSIS**

CALL UGR(N, X, G)

# **DESCRIPTION**

The UGR subroutine evaluates the gradient of the objective function of the problem decoded into OUTS-DIF.d at the point X, in the case where the only possible constraints are bound constraints.

## **ARGUMENTS**

The arguments of UGR are as follows

N [in] - integer

the number of variables for the problem,

X [in] - real/double precision

an array which gives the current estimate of the solution of the problem,

G [out] - real/double precision

an array which gives the value of the gradient of the objective function evaluated at X.

## **AUTHORS**

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## **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.

cgr(3M).

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