NAME
      CUTEST_uvartype – CUTEst tool to determine the type of each variable.

SYNOPSIS
      CALL CUTEST_uvartype(status, n, X_type)

DESCRIPTION
      The CUTEST_uvartype subroutine determines the type (continuous, 0-1, integer) of each variable involved
      in the problem decoded from a SIF file by the script *sifdecoder*.

      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_uvartype 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,

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

      X_type [out] - integer
            an integer array whose i-th component indicates the type of variable i. Possible values are 0 (a vari-
            able whose value may be any real number), 1 (an integer variable that can only take the values zero
            or one) and 2 (a variable that can only take integer values).

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

SEE ALSO
      CUTEst: a Constrained and Unconstrained Testing Environment with safe threads,
         N.I.M. Gould, D. Orban and Ph.L. Toint,
         Computational Optimization and Applications **60**:3, pp.545-557, 2014.

      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_cvartype(3M), sifdecoder(1).