

## ADAS Subroutine xxindx

SUBROUTINE XXINDX( N , ARR , INDX )

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C
C ***** FORTRAN77 SUBROUTINE: XXINDX *****
C
C PURPOSE: INDEXES AN ARRAY 'ARR' OF LENGTH 'N'. IT OUTPUTS THE ARRAY
C          'INDX()' SUCH THAT 'ARR(INDX(J))' IS IN ASCENDING ORDER
C          FOR J=1,2,...,N. THE INPUT QUANTITIES 'N' AND 'ARR' ARE
C          NOT CHANGED.
C
C REFERENCE: NUMERICAL RECIPES: The Art of Scientific Computing
C             (FORTRAN Version).
C             W.H.Press, B.P.Flannery, S.A.Teukolsky & W.T.Vetterling.
C             (Cambridge University Press, Cambridge). 1989. p.233
C             ISBN 0 521 38330 7
C
C CALLING PROGRAM: GENERAL USE
C
C SUBROUTINE:
C
C INPUT :      (I*4)  N          = INPUT ARRAY 'ARR()' LENGTH
C INPUT :      (R*8)  ARR()     = ARRAY TO BE INDEXED
C OUTPUT:      (I*4)  INDX()    = ASCENDING ORDER INDEX
C
C              (R*8)  INDXT     = TEMPORARY STORAGE FOR 'INDX' ELEMENT
C              (I*4)  L         = "HIRING" PHASE INDEX
C              (I*4)  IR        = "RETIREMENT-AND-PROMOTION" PHASE INDEX
C              (I*4)  I         = GENERAL USE
C              (I*4)  J         = GENERAL USE
C
C              (R*8)  Q         = TEMPORARY STORAGE FOR 'ARR' ELEMENT
C
C ROUTINES:   NONE
C
C NOTE:       USES THE HEAPSORT METHOD.
C
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C
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C
C          INTEGER          INDX(N) ,      N
C          REAL*8          ARR(N)
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