

Description

This routine sorts an array into ascending order.

Calling Sequence

CALL USORT1 (IDIM1,NUM,ARRAY1,ARRAY2,ISPTR,ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
IDIM1	Input	I*4	1	First dimension of array to be sorted
NUM	Input	I*4	1	Number of array positions to be sorted (can be less than or equal to second dimension of array to be sorted)
ARRAY1	Input	<u>1/</u>	IDIM1,NUM	Array to be sorted <u>2/</u>
ARRAY2	Output	<u>1/</u>	IDIM1,NUM	Array after sorting <u>2/</u>
ISPTR	Input	I*4	<u>3/</u>	Indicator whether relative location of the sorted array positions to the unsorted array is to be returned: <u>4/</u> 0 = no 1 = yes
ISTAT	Output	I*4	1	Status code: 0 = no errors

Notes:

- 1/ Can be A4 or I*4 data type.
- 2/ The input and output arrays can be the same.
- 3/ Dimension is 1 if ISPTR(1) is zero.
Dimension is 'NUM' if ISPTR(1) is 1.
- 4/ For example if before sorting:
 ARRAY1(1) = C
 ARRAY1(2) = B
 ARRAY1(3) = A

Then after sorting:

ARRAY2 (1) = A AND ISPTR (1) = 3
ARRAY2 (2) = B AND ISPTR (2) = 2
ARRAY2 (3) = C AND ISPTR (3) = 1