

IX.3.0B-SYSTEM-USORT2 SUBROUTINE USORT2

Description

Subroutine USORT2 sorts an array into ascending order.

The array is sorted by checking starting at the specified beginning position and ending at the specified ending position.

Calling Sequence

CALL USORT2 (IDIM1,NUM,IWORD1,IWORD2,ARAY1,ARAY2,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)
IWORD1	Input	I*4	1	First array position to be checked
IWORD2	Input	I*4	1	Last array position to be checked
ARAY1	Input	<u>1</u> /	IDIM1,NUM	Array to be sorted <u>2</u> /
ARAY2	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
```