

# Locate...By Statement

## Description

Use this version of Locate when you are dealing with sorted data. This statement returns the location where a specified string should be inserted, according to the specified sorting consideration.

The By clause in the BASIC+ Locate...By statement locates the sorted position (index) of a value.

## Syntax

**Locate** *substring* **In** *string* **By** *seq* [*Using delim*] *Setting* *POS* **Then** | *Else statements*

## Parameters

The Locate...By statement has the following parameters.

| Parameter        | Description  |       |               |    |                            |    |                                       |    |                             |    |  |
|------------------|--|-------|---------------|----|----------------------------|----|---------------------------------------|----|-----------------------------|----|--|
| <i>substring</i> | Specifies the value whose position is to be located in string.   |       |               |    |                            |    |                                       |    |                             |    |  |
| <i>String</i>    | Designates the string that is to be searched.  |       |               |    |                            |    |                                       |    |                             |    |  |
| <i>Seq</i>       | Locate...By uses seq to determine placement of substring. The By clause must follow the in clause in this general format. The seq parameter may have any of the following values: <table><tr><th>Value</th><th>Justification</th></tr><tr><td>AL</td><td>Ascending, Left-justified.</td></tr><tr><td>AR</td><td>Ascending, Right-justified (numeric).</td></tr><tr><td>DL</td><td>Descending, Left-justified.</td></tr><tr><td>DR</td><td>Descending, Right-justified (numeric).</td></tr></table> | Value | Justification | AL | Ascending, Left-justified. | AR | Ascending, Right-justified (numeric). | DL | Descending, Left-justified. | DR | Descending, Right-justified (numeric). |
| Value            | Justification  |       |               |    |                            |    |                                       |    |                             |    |  |
| AL               | Ascending, Left-justified.   |       |               |    |                            |    |                                       |    |                             |    |  |
| AR               | Ascending, Right-justified (numeric).  |       |               |    |                            |    |                                       |    |                             |    |  |
| DL               | Descending, Left-justified.  |       |               |    |                            |    |                                       |    |                             |    |  |
| DR               | Descending, Right-justified (numeric).   |       |               |    |                            |    |                                       |    |                             |    |  |
| <i>delim</i>     | Specifies the character that is to be used in the search for the substring. It may be any ASCII character. If dynamic arrays are being searched, delim should be a field mark (@FM), value mark (@VM), or a subvalue mark (@SVM). If a Using clause is not specified, a value mark is assumed. Do not include a delim character in a string expression.  |       |               |    |                            |    |                                       |    |                             |    |  |

## See also

[Index\(\)](#), [Locate](#), [InList\(\)](#)

## Example

```
* This internal subroutine sorts a list.

Sort_List:

  * LIST is an @FM-delimited list of names.
  transfer list to old
  * find out how many names
  numNames = dcount( old, @fm)
  for i = 1 to numNames
    Locate old<i> in list By "AL" Using @fm Setting pos else
      List = Insert(list, pos, 0, 0, OLD<I>)
    end
  next i

  return
```