HyperCard: Script to Sort Multiple Lines (7/92)

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TOPIC ---

Handler Name: quickSort, bubbleSort, merge

This handler, called QuickSort, takes a multiple-line expression and sorts
it into ascending alphabetical order.

DISCUSSION --

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function quickSort data
  put number of lines in data into lineCount
  if lineCount <= 10 then return bubbleSort(data)
  return merge(quickSort(line 1 to lineCount div 2 of data),¬
  quickSort(line lineCount div 2 + 1 to lineCount of data))
end quickSort

function bubbleSort data
  repeat with i = 1 to the number of lines in data
    repeat with j = i to the number of lines in data
      if line i of data > line j of data then
        get line j of data
        put line i of data into line j of data
        put it into line i of data
      end if
    end repeat
  end repeat
  return data
end bubbleSort

function merge list1,list2
  put empty into resultList
  put 1 into ptr1
  put 1 into ptr2
  put number of lines in list1 into lineCount1
  put number of lines in list2 into lineCount2
  repeat until ptr1 > lineCount1 and ptr2 > lineCount2
    if ptr1 > lineCount1 then -- use list2
      put line ptr2 of list2 & return after resultList
      add 1 to ptr2
```

```
    else if ptr2 > lineCount2 then -- use list1
      put line ptr1 of list1 & return after resultList
      add 1 to ptr1
    else if line ptr1 of list1 < line ptr2 of list2 then
      put line ptr1 of list1 & return after resultList
      add 1 to ptr1
    else
      put line ptr2 of list2 & return after resultList
      add 1 to ptr2
    end if
  end repeat
  return resultList
end merge
```

Keywords: <None>

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