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Computer Algorithm assignment 1

Q. Write a modular algorithm "Quick Sort" with at least three functions(modules) for sorting given 'n' numbers.

Algorithm for quick sort is given below:

```
Start
quickSort(array, leftmostIndex, rightmostIndex)
    if (leftmostIndex < rightmostIndex)
    pivotIndex <- partition(array,leftmostIndex, rightmostIndex)
    quickSort(array, leftmostIndex, pivotIndex - 1)
    quickSort(array, pivotIndex, rightmostIndex)
partition(array, leftmostIndex, rightmostIndex)
    set rightmostIndex as pivotIndex
    storeIndex <- leftmostIndex - 1
        for i <- leftmostIndex + 1 to rightmostIndex
        if element[i] < pivotElement
swap element[i] and element[storeIndex]
    storeIndex++
    swap pivotElement and element[storeIndex+1]
return storeIndex + 1
End
```