

Sort\_recursive(i\_start, i\_end)

Global array

i\_up = i\_start

i\_down = i\_end

i\_pivot = (i\_start + i\_end) / 2

WHILE i\_up < i\_down

IF array[i\_up] < array[i\_pivot] and array[i\_down] > array[i\_pivot]:

i\_up++

i\_down--

ELSE IF array[i\_up] >= array[i\_pivot] and array[i\_down] > array[i\_pivot]

i\_down--

ELSE IF array[i\_up] < array[i\_pivot] and array[i\_down] < array[i\_pivot]

i\_up++

ELSE IF array[i\_up] >= array[i\_pivot] and array[i\_down] < array[i\_pivot]

array[i\_up], array[i\_down] = array[i\_down], array[i\_up]

IF i\_up == i\_pivot

i\_pivot = i\_down

i\_up ++

ELSE IF i\_down == i\_pivot

i\_pivot = i\_up

i\_down++

ELSE

i\_up++

i\_down++

IF i\_start < i\_end

Sort\_recursive(i\_start, i\_pivot - 1)

Sort\_recursive(i\_pivot + 1, i\_end)

ELSE

RETURN

