

## Last Homework:

The original partition algorithm for Quicksort is by Hoare. Following is the pseudo-code.

```
def hoare_partition(arr, lo, hi):
    pivot = arr[lo]
    i = lo
    j = hi
    while True:
        repeat j-=1 until arr[j] <= pivot
        repeat i+=1 until arr[i] >= pivot
        if i < j:
            arr[i], arr[j] = arr[j], arr[i]
        else:
            return j
```

Work out how Hoare partition would work out on the example in the lecture:

9	8	3	4	11	6	13	1	7	10	12	0	2	5
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Notice that the pivot is now 9.