Quick Sort

```
void swap (int *x, int *y)
{
    int t = *x
    *x = *y
    *y = t
}

int partition (int a[], int start, int end)
{
    if (start <= end)
    int pivot = a[end]
    int pindex = start
    for(int i = start; i<end; i++)
    {
        if (a[i] <= pivot)
        {
            swap (&a[pindex], &a[i])
            pindex++;
        }
    }
    swap (&a[pindex], &a[end])
    return pindex
}
```

```
Void Quicksort(int a[], int start, int end)
{
    if (start<end){
        int pi = partition(a, start, end);
        Quicksort(a, start, pi-1);
        Quicksort(a, pi+1, end);
    }
}
```