QUICK SORT

```
Algorithm Partition(A, low, high)
{
      pivot := A[low];
      i := low;
      j := high;
      while(i < j) do
      {
            while(A[i] <= pivot) do
                  i := i + 1;
            while(A[j] > pivot) do
                  j := j - 1;
            if(i < j) then
                  swap(A[i], A[j]);
      }
      swap(A[low], A[j]);
      return(j);
}

Algorithm QuickSort(A, low, high)
{
      if(low < high) then
      {
            j := Partition(A, low, high+1);
            QuickSort(A, low, j-1);
            QuickSort(A, j+1, high);
      }
}
```