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// From http://gauss.ececs.uc.edu/Courses/C321/html/quicksort.java.html


public class QuickSort {
    public static void swap (int A[], int x, int y) {
        int temp = A[x];
        A[x] = A[y];
        A[y] = temp;
    }

    public static int partition(int A[], int f, int l) {
        int pivot = A[f];
        while (f < l) {
            if (A[f] == pivot || A[l] == pivot) {
                // for you to fill this out
            }
            while (A[f] < pivot) f++;
            while (A[l] > pivot) l--;
            swap (A, f, l);
        }
        return f;
    }

    public static void Quicksort(int A[], int f, int l) {
        if (f >= l) return;
        int pivot_index = partition(A, f, l);
        Quicksort(A, f, pivot_index);
        Quicksort(A, pivot_index+1, l);
    }

    public static void main(String argv[]) {
        int A[] = new int[argv.length];
        for (int i = 0 ; i < argv.length ; i ++)
            A[i] = Integer.parseInt(argv[i]);

        Quicksort(A, 0, argv.length-1);

        for (int i = 0 ; i < argv.length ; i ++) System.out.print(A[i] + " ");
        System.out.println();
    }
}
```