

```
public static void quicksort(Comparable[] a, int low, int high) {
    // If there's fewer than two elements, do nothing.
    if (low < high) {
        int pivotIndex = random number from low to high;
        Comparable pivot = a[pivotIndex];
        a[pivotIndex] = a[high];           // Swap pivot with last item
        a[high] = pivot;

        int i = low - 1;
        int j = high;
        do {
            do { i++; } while (a[i].compareTo(pivot) < 0);
            do { j--; } while ((a[j].compareTo(pivot) > 0) && (j > low));
            if (i < j) {
                swap a[i] and a[j];
            }
        } while (i < j);

        a[high] = a[i];
        a[i] = pivot;                     // Put pivot in the middle where it belongs
        quicksort(a, low, i - 1);         // Recursively sort left list
        quicksort(a, i + 1, high);        // Recursively sort right list
    }
}
```