

```
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  
    }  
}
```