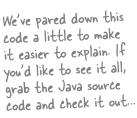
Sorting with Template Method

What's something we often need to do with arrays? Sort them!

Recognizing that, the designers of the Java Arrays class have provided us with a handy template method for sorting. Let's take a look at how this method operates:

We actually have two methods here and they act together to provide the sort functionality.





The first method, sort(), is just a helper method that creates a copy of the array and passes it along as the destination array to the mergeSort() method. It also passes along the length of the array and tells the sort to start at the first element.

```
public static void sort(Object[] a) {
   Object aux[] = (Object[])a.clone();
   mergeSort(aux, a, 0, a.length, 0);
}
```



The mergeSort() method contains the sort algorithm, and relies on an implementation of the compareTo() method to complete the algorithm. If you're interested in the nitty—gritty of how the sorting happens, you'll want to check out the Java source code.

}