

ANONYMOUS AND LOCAL CLASSES

REMEMBER HOW IN JAVA ALL CODE MUST
RESIDE IN SOME CLASS, AND CANNOT BE
FLOATING ABOUT?

THAT'S A GREAT RULE - IT FORCES AN
OBJECT-ORIENTED STRUCTURE TO ALL
JAVA PROJECTS

BUT SOMETIMES IT CAN BE A BIT OF
OVERKILL - FOR INSTANCE IF THERE IS A LITTLE
LOGIC THAT YOU ONLY WANT TO USE IN
A VERY SPECIFIC CONTEXT AND THEN NOT
RE-USE

ANONYMOUS AND LOCAL CLASSES
ARE MEANT FOR EXACTLY THESE SITUATIONS

ANONYMOUS AND LOCAL CLASSES ARE FOR QUICK-AND-DIRTY LITTLE BITS OF CODE

THEN PASS AN OBJECT OF THIS CLASS RIGHT INTO THE COLLECTIONS.SORT METHOD

```
// Step 1: Create a list of strings
List<String> listOfStrings = new ArrayList<String>();

// Step 2: populate listOfStrings with names from a data file
// Won't bother with the code for this here

// Step 3: Sort this list of strings in lexicographical order,
// but with the added twist that if the name "Donald Trump" appears
// in this list, it must appear first.
Collections.sort(listOfStrings, new Comparator<String>() {
    public int compare(String s1, String s2) {
        if (s1.equals("Donald Trump") && !s2.equals("Donald Trump")) {
            return 1;
        } else if (s2.equals("Donald Trump") && !s1.equals("Donald Trump")) {
            return -1;
        }
        return s1.compareTo(s2);
    }
});
```

BTW, NOTICE HOW THE "NEW" KEYWORD IS USED TO CREATE AN OBJECT OF THIS CLASS WITHOUT A NAME

CREATE AND INSTANTIATE A CLASS THAT IMPLEMENTS THE COMPARATOR<STRING> INTERFACE IN A SINGLE LINE

COMPARATOR<STRING> HAS ONLY ONE MEMBER FUNCTION THAT IT MUST IMPLEMENT - DO THAT RIGHT HERE ON THE FLY

WE JUST NEEDED THIS OBJECT ONCE - SO AN ANONYMOUS CLASS WAS PERFECT..

..HAD WE NEEDED IT A FEW TIMES, BUT STILL ONLY LOCALLY, WE WOULD SIMPLY GIVE THE CLASS A NAME AND USE IT AS A LOCAL CLASS