

Exercises:

1. Program the UDT *CountingIterable*, that implements *Iterable* and has an *ArrayList<String>* as field. The idea behind *CountingIterable* is that it can be created with an *ArrayList<String>* and as soon as the *CountingIterable* is iterated in an enhanced **for** loop, it'll prefix each item of the *ArrayList<String>* with an automatically incremented counter starting at 1:

```
ArrayList<String> words = new ArrayList<String>();
words.add("Helga"); words.add("Olivia"); words.add("Trish");

CountingStringIterable countingStringIterable = new CountingStringIterable(words);
for (Object item : countingStringIterable) {
    System.out.println(item);
}
// > 1. Helga
// > 2. Olivia
// > 3. Trish
```

Hint: to implement *Iterable* you also need to provide an implementation of *Iterator*. This can be done with a local **class**.

2. Implement an example using an anonymous *Comparator*.

Remarks:

- As always.