Intermediate Scala

Practical Exercises

Chapter 3: About Scala Types

1. A MultiSet, sometimes called a Bag, is a collection that allows duplicates, while not imposing any ordering on the elements.

   Define a class to represent a MultiSet in Scala. Use whatever existing collection type(s) you need to underpin the collection types. For each element in the collection, you should maintain an "occurrence" count, reflecting on how many times the element has been added.

   Make the MultiSet invariant initially. What changes would be required to your implementation to make the MultiSet covariant in its element types?

2. Investigate the effects on your implementation of the MultiSet if you use an abstract type member rather than a type parameter.