1. *Implementing bidirectional 1:1 associations with a factory.*

We wish to maintain a bidirectional 1:1 relationship between Person and BirthInfo when data for these is read from a database. We wish to guarantee that instances of these classes are created in just the right way, to maintain the bidirectional 1:1 relationship. After instances of each are created, we want to make sure that classes are read-only (i.e. immutable). To do this we:

* Create instances using a Factory – no instance of either class can be created from outside their package except by way of the Factory.
* Keep all classes related to Person and BirthInfo in the same package
* Provide only package level access for all constructors and setters
* Declare all classes in the package final

See lesson5.lecture.factorymethods6 to see how this pattern is implemented for Student/GradeReport.