

## Intermediate Scala

### Practical Exercises

#### Implicits and Type Classes

1. Define a type to represent a date, consisting of day, month and year. Define a second type to represent a time as hours, minutes and seconds.

Using regular expressions, develop implicit conversions from the String type to your date type, and to your time type.

2. Define a typeclass to represent “Ordering” of another type. The typeclass should provide two methods, `<` and `>`, which have the expected meaning. You can leverage other types, such as `java.lang.Comparable[T]` to help in your definition.

Create instances of your typeclass for simple numeric types such as `Int`.

Define a class to represent Rational Numbers (Fractions). Provide an instance of your typeclass to for this class.

Experiment with using Context Bounds in defining other methods that require their argument type to implement the functionality provided by the typeclass.