# CS 5696 Functional Design \& Programming <br> Spring Semester, 2015 <br> Exercise 1 <br> © 2015, All Rights Reserved, SDSU \& Roger Whitney San Diego State University -- This page last updated 8/27/15 

4Clojure (http://www.4clojure.com) contains a 156 small Clojure problems with solutions. These problems are a good way to get practice with syntax of Clojure, practice using basic Clojure functions and the Clojure way of solving problems.

If you register at the site, once you solve a problem you can see how others solved the problems. For the 10-20 problem the solutions are so simple the other solutions are not interesting. Once the problems get more difficult it is very instructive to solve the problem and see how others solved the same problem.

The problems have a number and a title. The website list of problems only shows you the titles. Below I have listed problems that I want you to solve for next week. You should be able to talk about your solution and one other solution to the problem.

Note 1. Yes you can find solutions to these problems on the Internet. The value is in solving them not looking up the solutions. One does not gain muscles by watching someone else lift weights.

Note 2. Some of the early problems are very easy. You can answer some of them without knowing any Clojure. These problems introduce you to the syntax and semantics of various functions. In a few cases earlier problems will help solve later problems. So you might want to start solving the problems from the top of the list.

Note 3. When you enter your solution on the website you get no feedback on why your solution is wrong. You will find it less frustrating and likely much faster to copy the tests from the website into Light Table and solve them there.

## For Tuesday Sept 1

19 Last Element
22 Count a Sequence
23 Reverse a Sequence
26 Fibonacci Sequence
38 Maximum value
For Thursday Sept 3
21 Nth Element
34 Implement range
39 Interleave Two Seqs
32 Duplicate a Sequence
27 Palindrome Detector

