Numerical methods and F90, fall 2015

Exercise 10 (the very last one)

Return by Dec 16.

1. Generate a sequence of random numbers and use the autocorrelation function to test potential periodicity.

2. Use the first degree structure function to study possible periodicity of the sequence of the previous problem.

3. Modify the forking program of the previous exercises to handle functions of two variables. Proceed alternatingly in the directions of the x and y axes. Test the program by finding the minimum of the Rosenbrock banana function.

4. Investigate the linear algebra module to find which loops can be run in parallel mode on several processors. (No programming needed!)