

1. Add your own implementation (third method, using the **for** loop) into the moving\_average\_smoothing.m program.
2. Modify the moving\_average\_smoothing.m program to create a new one so that it implements the causal system in Prob. (3a) (slide 66, Chapter 2) in 4 different ways:
  - Averaging of time-shifted input signals
  - Using conv() function in Matlab (or convolve() function in scipy.signal)
  - Using **for** loop
  - Using filter() function (you need to read API documentation)