ECS512 Sound Design - Lab 2: Delay

Please go through each of these topics and make sure you understand them as they will prime you for assignment 1.

- **Audio Delay**
  - Please go to http://www.pd-tutorial.com/english/ch03s04.html
  - Go through section 3.4.1.3.
  - Create two more delay reads using a different delay time for each. This is the equivalent of a **multi-tap delay**.
  - Route the output of vd~ to the input of delwrite~ to generate **feedback**. **IMPORTANT** make sure you put a *~ .99 before the input to delwrite. This is so that the amplitude of the signal eventually decays to zero.
  - **Reverb** - Go through section 3.4.2.6 – If you don't have a microphone then generate a tone just like you did in Lab 1 instead. If you don't know what reverb is, check out http://en.wikipedia.org/wiki/Reverberation

- **Comb Filtering**
  - Go through section 3.4.2.8
  - http://en.wikipedia.org/wiki/Comb_filter

- **Karplus-Strong Algorithm**
  - Go through section 3.4.2.10
  - Assignment 1 is based on this algorithm
  - More information here http://music.columbia.edu/cmc/musicandcomputers/chapter4/04_09.php
  - This is the simplest type of **digital waveguide synthesis**. Can be used to model drums, bells and all sorts of instruments.