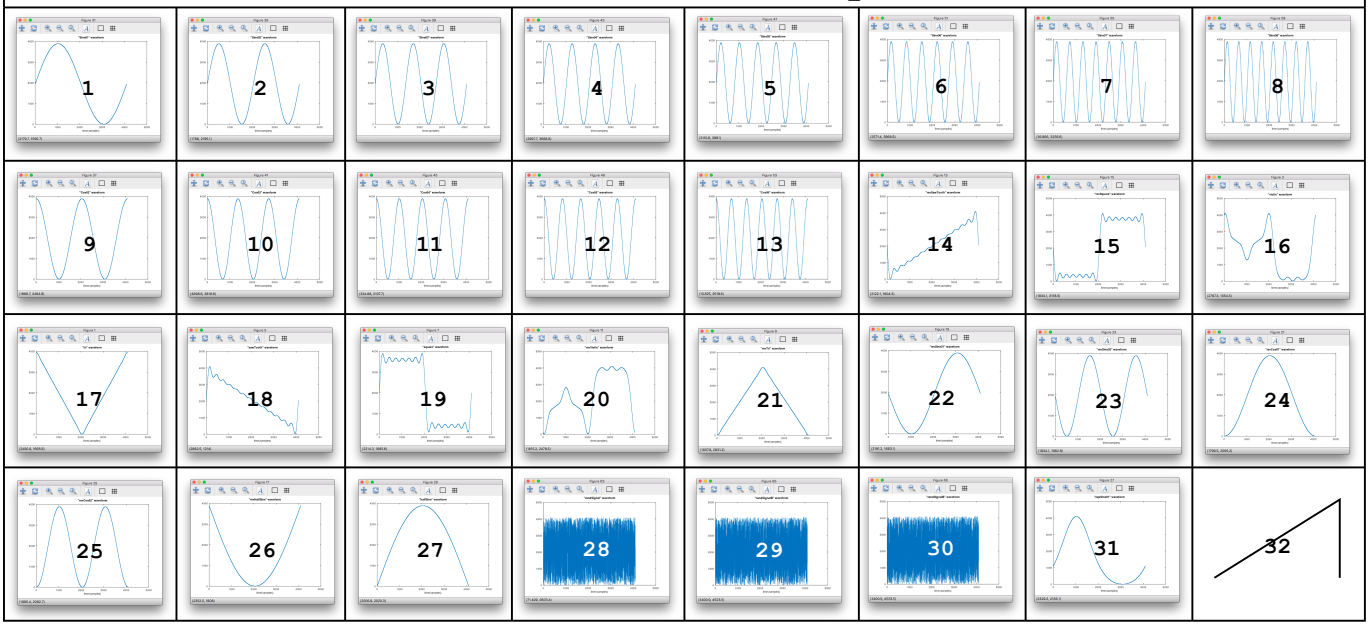
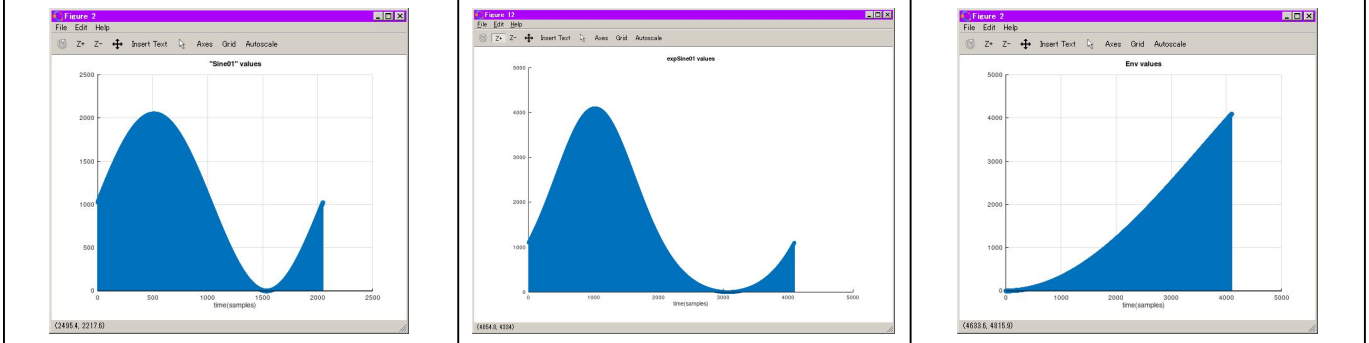
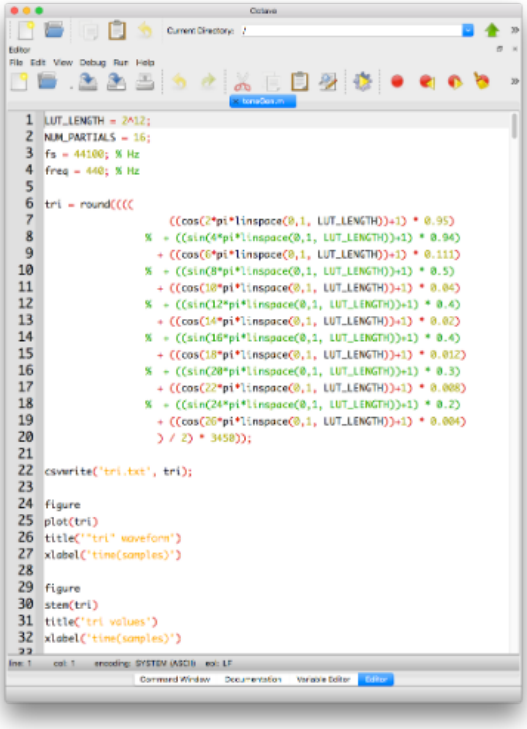
Wavetable Library



Envelope Library





```
LUT_LENGTH = 2^12;
NUM_PARTIALS = 16;
fs = 44100; % Hz
freq = 440; % Hz

tri = round((((
                    ((cos(2*pi*linspace(0,1, LUT_LENGTH))+1) * 0.95)
                  % + ((sin(4*pi*linspace(0,1, LUT_LENGTH))+1) * 0.94)
                    + ((cos(6*pi*linspace(0,1, LUT_LENGTH))+1) * 0.111)
                  % + ((sin(8*pi*linspace(0,1, LUT_LENGTH))+1) * 0.5)
                    + ((cos(10*pi*linspace(0,1, LUT_LENGTH))+1) * 0.04)
                  % + ((sin(12*pi*linspace(0,1, LUT_LENGTH))+1) * 0.4)
                    + ((cos(14*pi*linspace(0,1, LUT_LENGTH))+1) * 0.02)
                  % + ((sin(16*pi*linspace(0,1, LUT_LENGTH))+1) * 0.4)
                    + ((cos(18*pi*linspace(0,1, LUT_LENGTH))+1) * 0.012)
                  % + ((sin(20*pi*linspace(0,1, LUT_LENGTH))+1) * 0.3)
                    + ((cos(22*pi*linspace(0,1, LUT_LENGTH))+1) * 0.008)
                  % + ((sin(24*pi*linspace(0,1, LUT_LENGTH))+1) * 0.2)
                    + ((cos(26*pi*linspace(0,1, LUT_LENGTH))+1) * 0.004)
                    ) / 2) * 3458));

csvwrite('tri.txt', tri);

figure
plot(tri)
title('"tri" waveform')
xlabel('time(samples)')

figure
stem(tri)
title('tri values')
xlabel('time(samples)')
```

The waveforms are generated by the GNU Octave in CSV format. GNU Octave is a free math software which is downloadable from: https://www.gnu. org/software/octave/

The software works on the Windows and Linux. Unfortunately, the Mac version needs a little bit complex works for the installation.