These programs read keystrokes using Tkinter. The keystrokes are used to adjust the parameters of a signal.

The signal is displayed in a Tkinter window using the animation function.

Libraries: Tkinter, Pyaudio, and Matplotlib. Animation

prog\_01\_sin.py

Adjust the frequency of a sine wave via key strokes.

prog\_02\_sin.py

Adjust the frequency of a sine wave via key strokes. Play the sine wave using Pyaudio.

prog\_03\_diffeq.py

Play and plot a note, calculated as the output of a filter implemented as a second-order difference equation. When the user presses a key on the keyboard, a note is played.