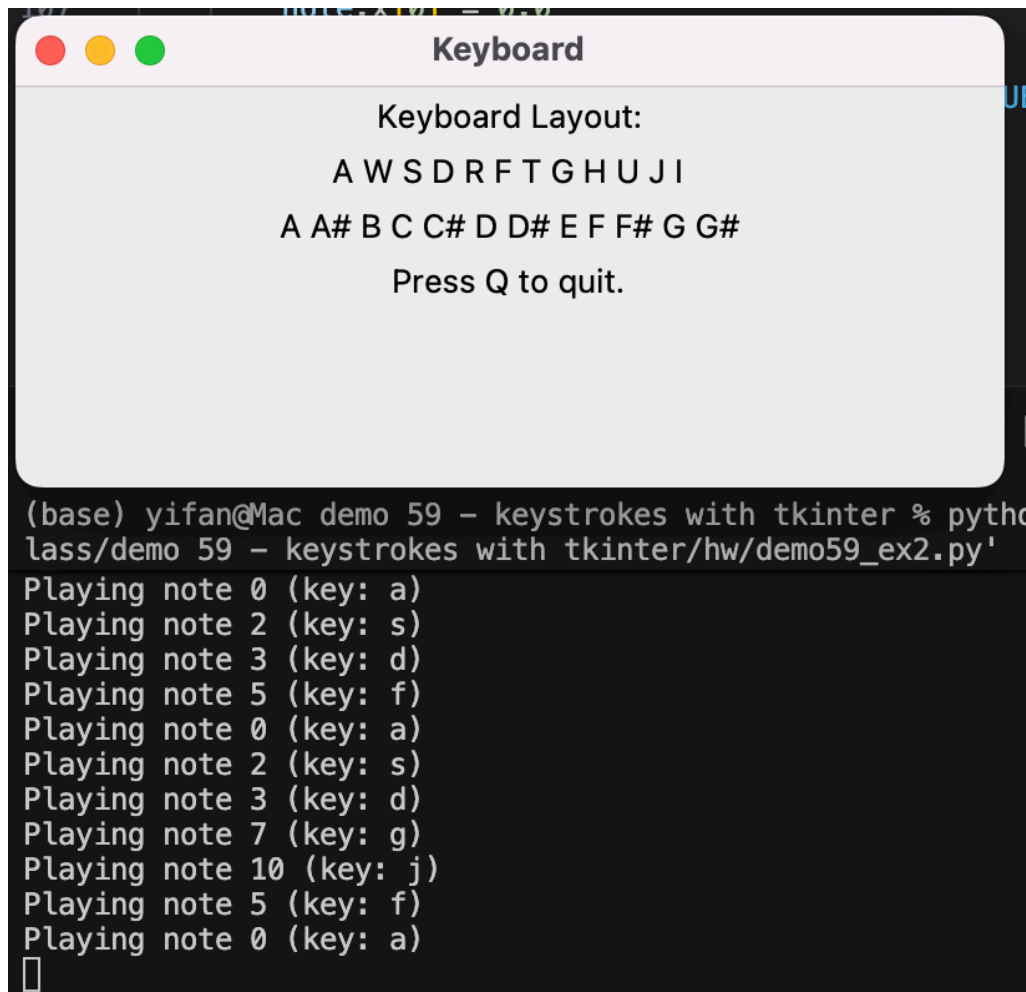


DSP Lab Demo 59 Ex 2



Features

1. octave from A to G#, each note frequency calculated as:

$$f_k = 2^{(k/12)} \times f_0$$

2. Mappings:

- keys: A W S D R F T G H U J I
- notes: A A# B C C# D D# E F F# G G#
- Q to quit

3. Filters:

- each note uses a second-order IIR filter

- separate state variables for each filter
- filters process independently and outputs are mixed

4. **GUI:**

- keyboard layout, displays note mappings