

I make the three sliders to control the maximum/minimum frequency. And two Button contains global boolean Variable "mode", which can determine the frequency templates in the for loop. Another button "Quit" to determine the global Continue to stop the while loop.

Besides, I use the $(\text{maxfrequency} + \text{minfrequency}) / 2 \times \sin(2\pi \times \text{time})$ to get the frequency in the siren sound.

$\text{sawtooth}(0.5 \times \pi \times 0.5 \cdot n) \times \text{frequency}$, to get triangle wave.

keep update the buffer, and decrease the delay.

In the end get the siren sound.