

<b>Tkinter and Pyaudio</b>										
						<b>Input</b>				
<b>Program name</b>	<b>Pyaudio</b>	<b>Numpy</b>	<b>Tkinter</b>	<b>Buttons</b>	<b>Slider</b>	Sine	File	Mic	<b>Effect</b>	
play_sine_01.py	Y					Y				Plays a sine wave by writing one sample at a time.
play_sine_02_blocks.py	Y					Y				Plays a sine wave by writing the signal in blocks.
Tk_demo_01_update.py			Y	Y						This program uses root.update function in Tkinter instead of root.mainloop.
Tk_demo_02_buttons.py	Y		Y	Y		Y			Button control of sine wave frequency	Use buttons to adjust the frequency of a sinusoid.
Tk_demo_03_slider.py	Y		Y		Y	Y			Slider control of sine wave frequency	Use a slider to adjust the frequency of a sinusoid.
Tk_demo_04_slider.py	Y		Y		Y	Y			Slider control of sine wave amplitude and frequency	Use two sliders to adjust the frequency and gain of a sinusoid.
Tk_demo_04_slider_wavefile.py	Y		Y		Y	Y			Slider control of sine wave amplitude and frequency	Saves audio signal to wave file
play_file_loop_pause.py	Y		Y				Y			Play/pause in loop
play_file_loop_pause_gain.py	Y		Y		Y		Y			Play/pause in loop with gain slider
play_file_loop_AM_slider_numpy.py	Y	Y	Y		Y		Y			AM effect, adjust modulation frequency via slider
play_file_loop_filter_slider_numpy.py	Y	Y	Y		Y		Y			Filter with adjustable cut-off frequency
mic_filter_slider_numpy.py	Y	Y	Y		Y			Y		filter, slider for cut-off frequency