DSP Lab Demo 20 **Exercise** 1

This Python program implements the Karplus-Strong algorithm for real-time guitar string synthesis using PyAudio.

Key Features:

- Circular buffer implementation

- Computation of the difference equation
  $$y(n) = K/2 * y(n - N) + K/2 * y(n - N - 1)$$

Parameters:

- Sampling rate: 8000 Hz

- Delay length: 60 samples

- Feedback gain (K): 0.93