demo 09 - circular buffer (long buffer)

Note: The two program produce the same output:

echo_via_circular_buffer.py
echo via circular buffer long.py

But the second program uses a longer buffer than necessary. In that program, two buffer indices are needed: one index for reading from the buffer, another index for writing to the buffer.

A long buffer in useful when we need to change the delay duration in real-time as we process a signal. For example, the vibrato effect requires a time-varying delay. So, to implement the vibrato effect, we need a buffer that is longer than necessary.