## Quiz #4: Arrays, Clusters, Shift Registers, Case Structures, Graphs

**Inputs**: One "serve" button.

One "stop" button.

One slider to control the paddle speed

**Outputs**: One x-y graph

One "in play" indicator.

A numeric "hit streak" counter.

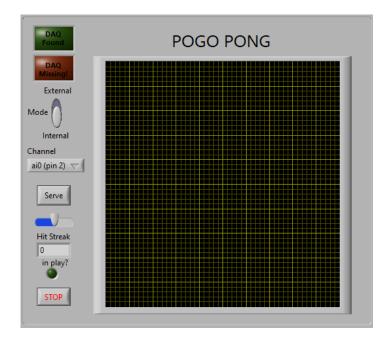
**Operation**: Run once

**Hardware:** One USB-6001 DAQ, and one adjustable power supply

**SubVI's:** Detect Devices, Multi AI Init

You may start with the template provided on the course homepage.

- a. Restore the 12 deleted elements needed to make the program work. Only actual objects were deleted, not just wires (although sometimes when you remove an object the wires disappear with it). While working, you must maintain a numbered list, on paper, of the objects you add in (see other side...)
- b. When in "external" mode, the speed of the paddle is controlled by the voltage knob on a power supply (see second side of this sheet). When in "internal" mode, the speed of the paddle is controlled by the on-screen slider.
- c. Adjust the "minimum" and "maximum" voltage constants so that the voltage knob easily controls the speed of the paddle (i.e., so that you don't need to rotate the voltage knob a full turn to make the paddle move).



Quiz #4
LabVIEW Dr. Pogo

## Assignment is due "in class" on Thursday, October 16, 2025

## The 12 deleted items:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.