Simulation 4 (Video) is to demonstrate the port B interrupts that enable the buttons of the auxiliary board to be used to control the data collection session. I first begin by setting up the data collection session with a period of 500ms and to run for 60sec. Additionally, I select for a temperature measurement to be taken at 12750ms or 12.75sec. Lastly, the output is saved to a both a .csv and .txt file.

Note: I set the temperature to notify to 0 because this feature was not successfully implemented.

The collection session begins with me demonstrating B0 (furthest to left) pausing and then unpausing data collection. Then, I reset data collection by pressing B4 (furthest to right) data collection including the output files. Next, I take a couple temperature measurements using B2 and flag a few measurements using B3. Finally, I abort data collection by pressing B1.

Looking at the output files, the measurements taken as a result of pressing B3 occur at 18049.4ms, 20596.267ms, 23354.328ms, 25479.13ms, 25947.13, 26393.31ms, and 26651.2ms. The three flagged comments may be seen as well and the data collection ends early due to being aborted. It also does not show data collected before the session was reset. These results are as desired.