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Logic Project 2 Report

Part 1:

I created the full adder as per the assignment and verified that it properly outputs values.

Part 2:

I used my full adder schematic to create a 4-bit ripple adder. I had some trouble with the initial design, but I re-watched some of the lectures and was able to clarify my mistake (I was using the wrong wires).

Part 3:

I wired the add\_sub input into my 4-bit adder and verified that the math was being performed correctly.

Part 4:

I created an 8-bit full adder using 2 4-bit full adders with logic flags for zeros, negatives, and overflows. I could not find a way to combine the 2 separate 4-bit outputs, so I assigned them separately and did the math myself when I needed to know the actual output of the circuit.

I was unable to properly configure this circuit. My adders do not output the correct values. My V, N, and Z checks all work properly - ignoring the fact that they are working with the wrong values. I was unable to identify the issue in time for submission.