Verification Strategy:

For part 1:
Same as lab 3, test each input combination for each gate of the DUT. Only difference is the power control. Failure of this will be obvious, because without power the gates will not work.

For part 2:
To verify that the program correctly identifies the IC, I will test it with each IC, making sure that it is correct each time. Because of successful verification of the first part, ic_test_v2, the IC's are known to be functional, and the only variable is whether the program knows which IC it is testing. I will verify this manually.