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Lab Quiz 3

Problem

You have **60 minutes** to design a counter that counts the sequence 3, 0, 2 (repeat).

Instructions

- 1. Draw a next state truth table to count the sequence: 3, 0, 2 (repeat).
 - a. The counter should asynchronously start at 3 with START.
 - b. Use a JK-FF for the Msb, and D-FFs for all other bits.
- 2. Use K-maps to create MSOP or MPOS equations that describe the inputs to your flip-flops
- 3. Design and simulate your circuit in Quartus.
- 4. Use your debounced switch for your circuit.
- 5. Use your DAD for START input and for all of the outputs.

Submit to Lab - Quiz 3 - Generic

- 1. Screenshot of Quartus BDF.
- 2. Screenshot of simulation output (no need to annotate).
- 3. Your Quartus .qar file.

Submit to Lab - Quiz 4 - Phone

1. Scan of your breadboard and scratch paper (hand-drawn circuit, voltage table, truth table, switch and LED legends).