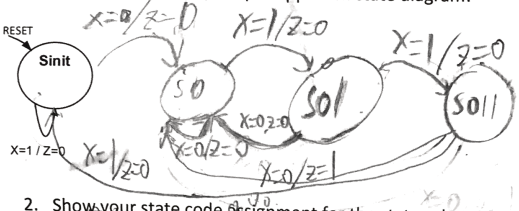
6 Review / Lab Report

Name: Zhiyuan Ning Score: _____

Due: _____

(Detach and turn this sheet along with any other requested work or printouts)

1. Reprint your Mealy-output approach state diagram:



2. Show your state code assignment for the states above.

Sinit	00
S0	01
S01	10
S011	11

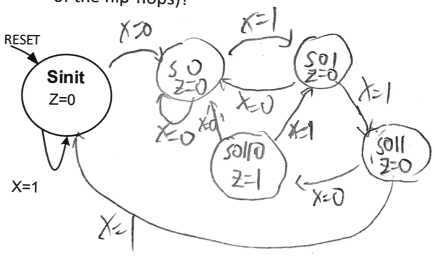
$Z = Q_1 Q_0 \bar{X}$

$D_0 = \bar{Q}_1 \bar{Q}_0 X + Q_1 Q_0$

$D_1 = \bar{Q}_1 Q_0 X + Q_1 \bar{Q}_0 X$

3. How many states did your Mealy-style approach require? 4

4. Go back and consider a Moore-style output approach for Z. Draw the required state diagram (you don't actually have to design the logic for this approach, just the state diagram). How many flip-flops would this design require? What size K-map (3-var, 4-var, 5-var, etc. would be required to find the logic for the D-inputs of the flip-flops)?



How many flip-flops will this Moore-Design require? 3

What size K-Maps (3, 4, 5-var, etc.) would your D-inputs require? 4

Turn in the following items:

- Completed seqdet.v and seqdet_tb.v on our website
- The answers to the questions above on this page