

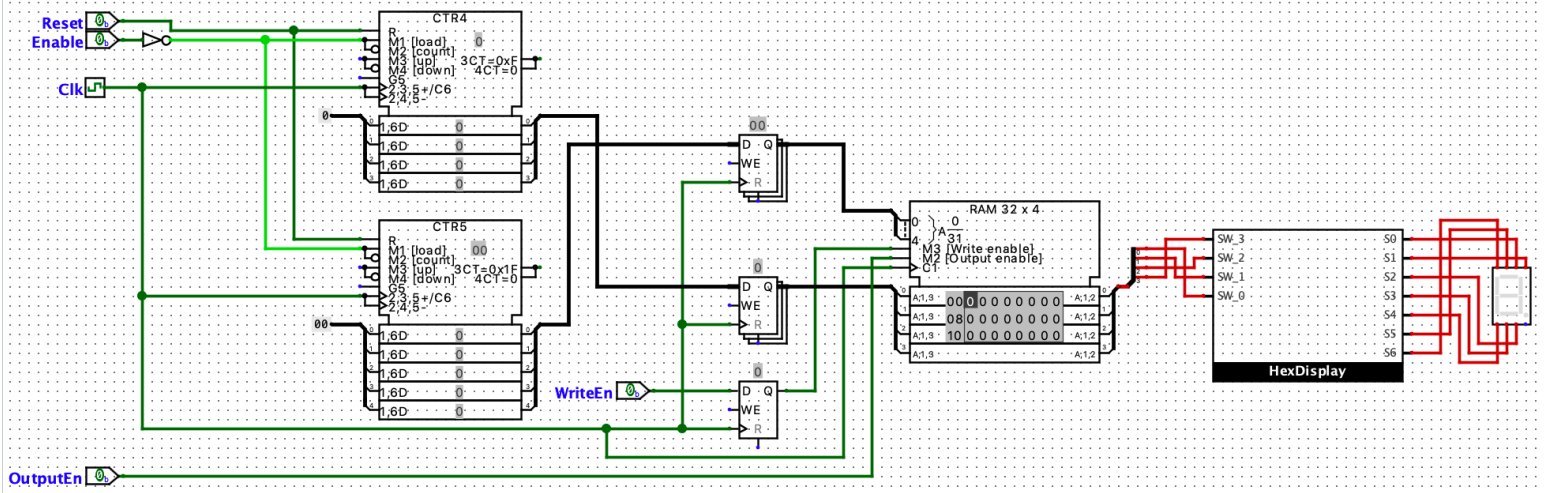
CSC258 Lab7 Pre-Lab Report

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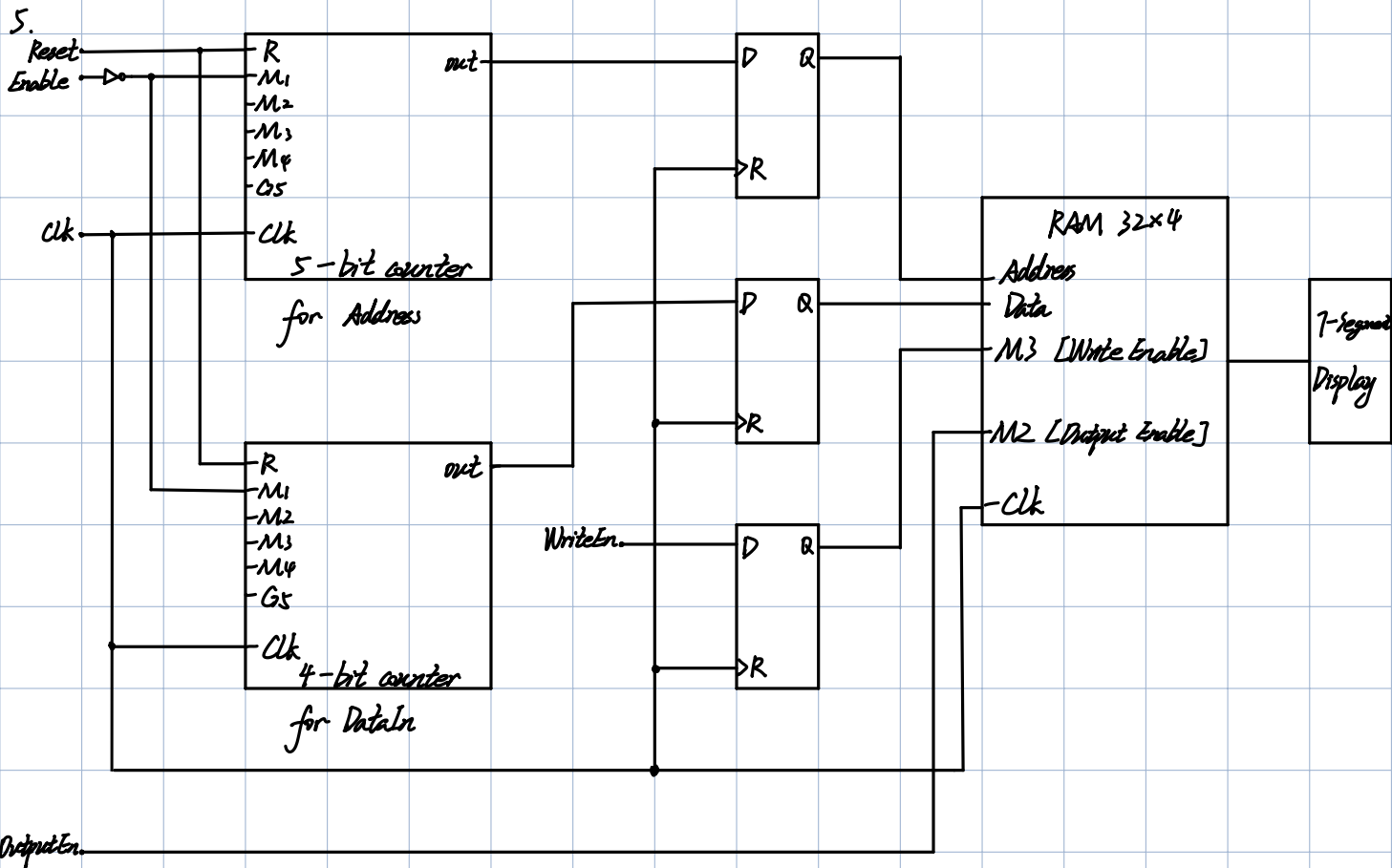
Part I

1. 3. 4.

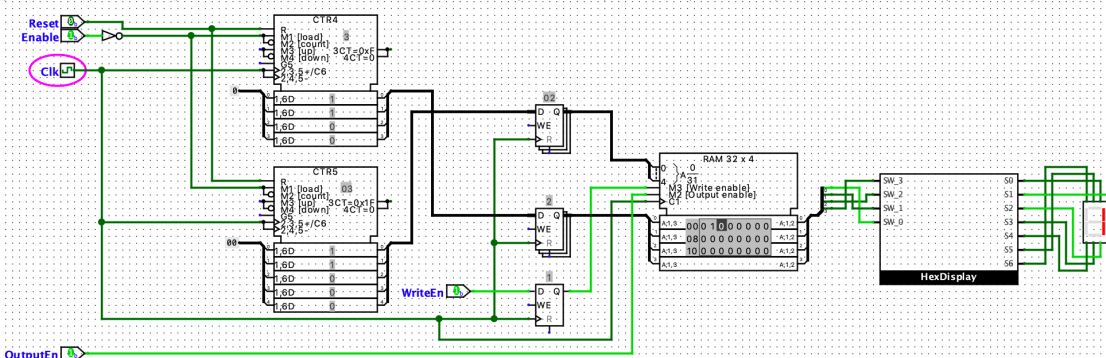
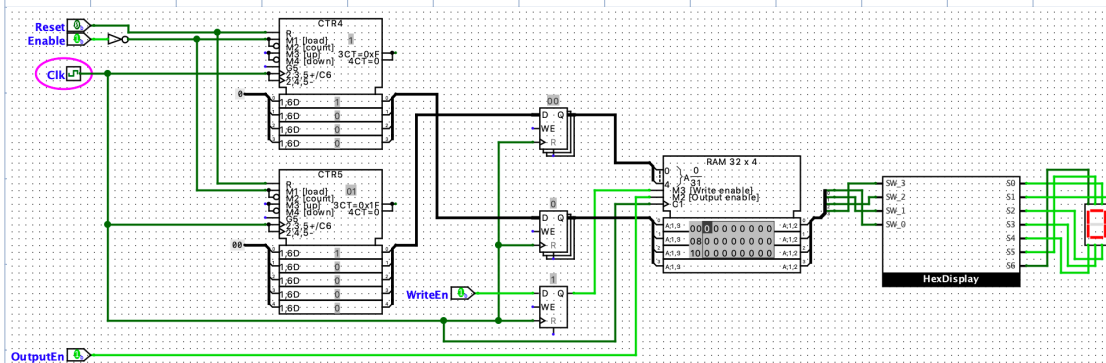


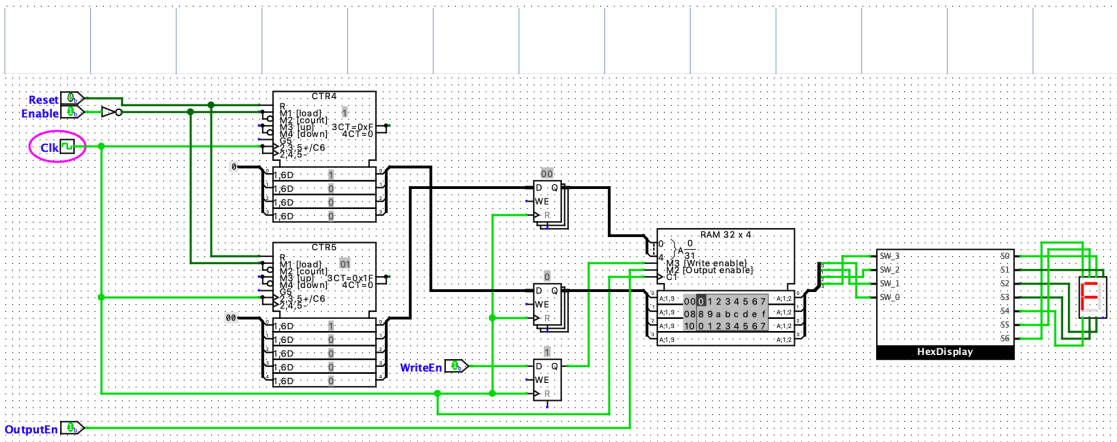
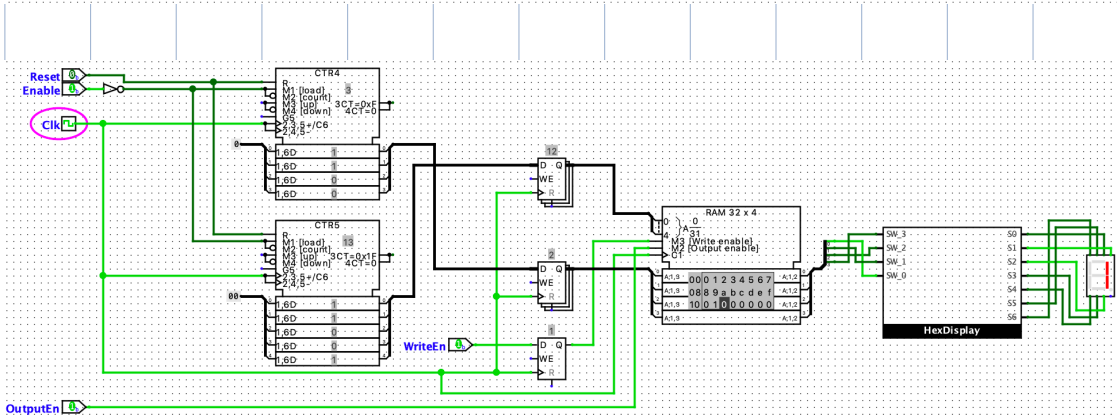
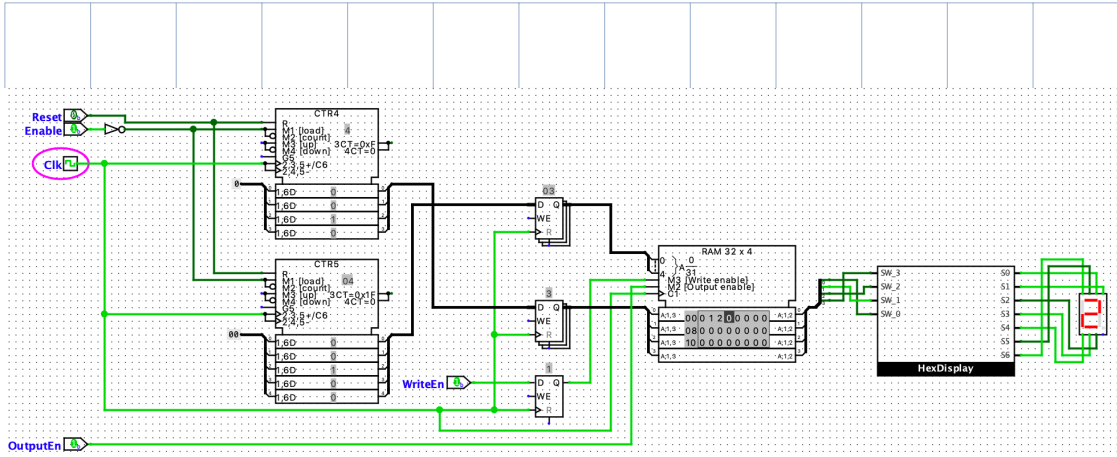
2.

- ① When the clock goes high and both Write Enable and Output Enable signals are off, it will NOT store the data into the RAM address and the output will remain unchanged.
- ② If both signals are on, the data will be stored at the corresponding RAM address and the output will be updated.



6.





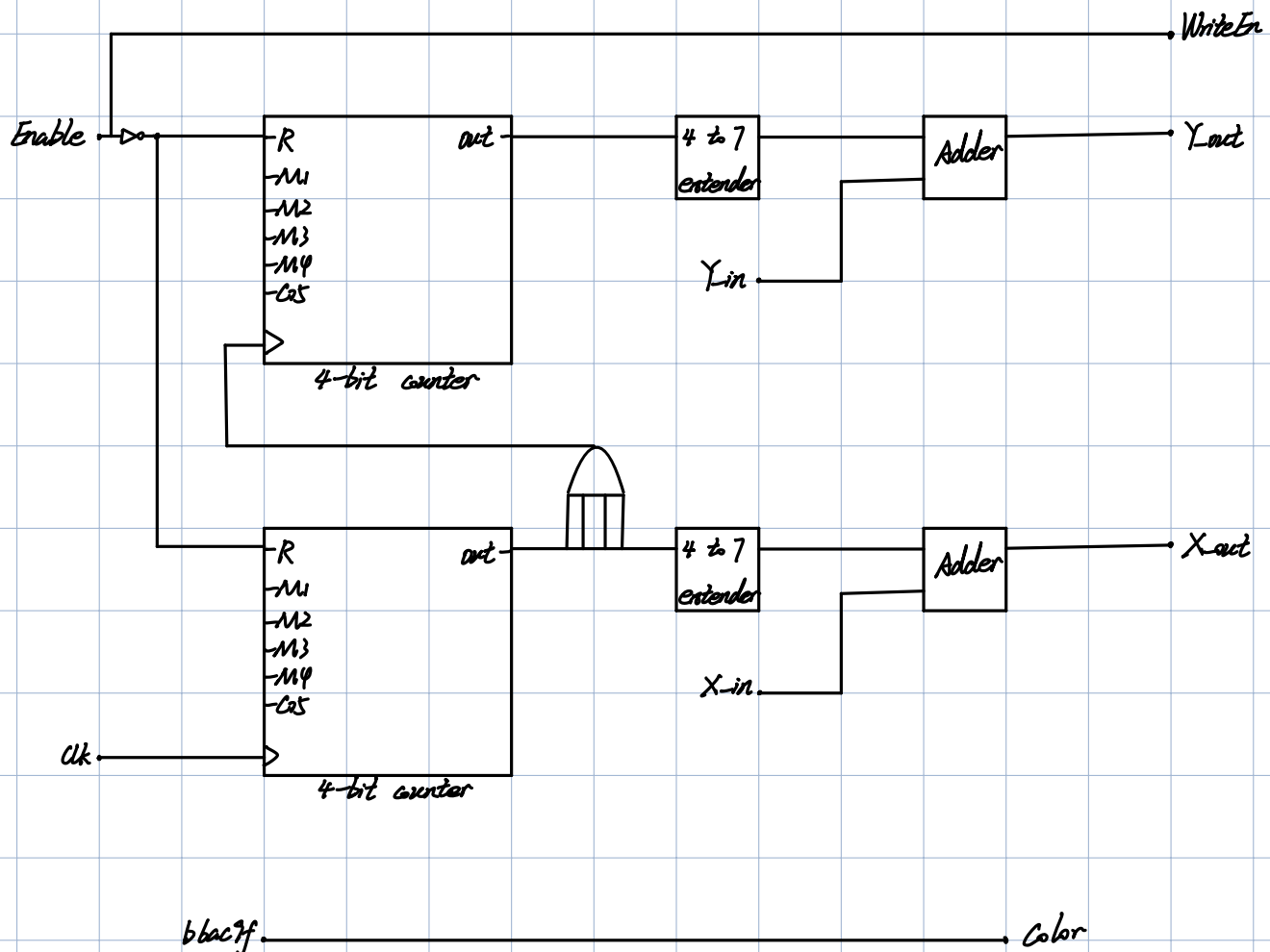
Part II

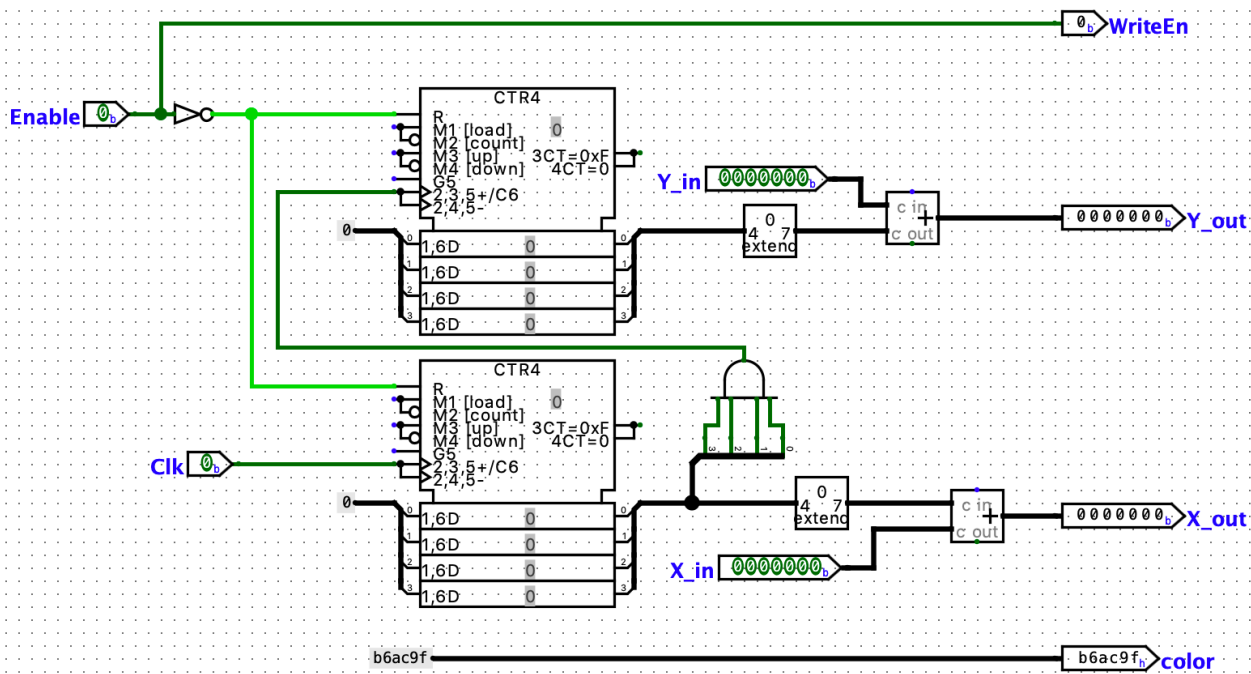
In your prelab report, answer the following questions: (PRELAB)

1. What happens if you don't turn Enable off before updating X and Y?
2. What happens if you turn Enable off before 256 clock cycles have passed?
3. What happens if you turn Reset on while Enable is on?

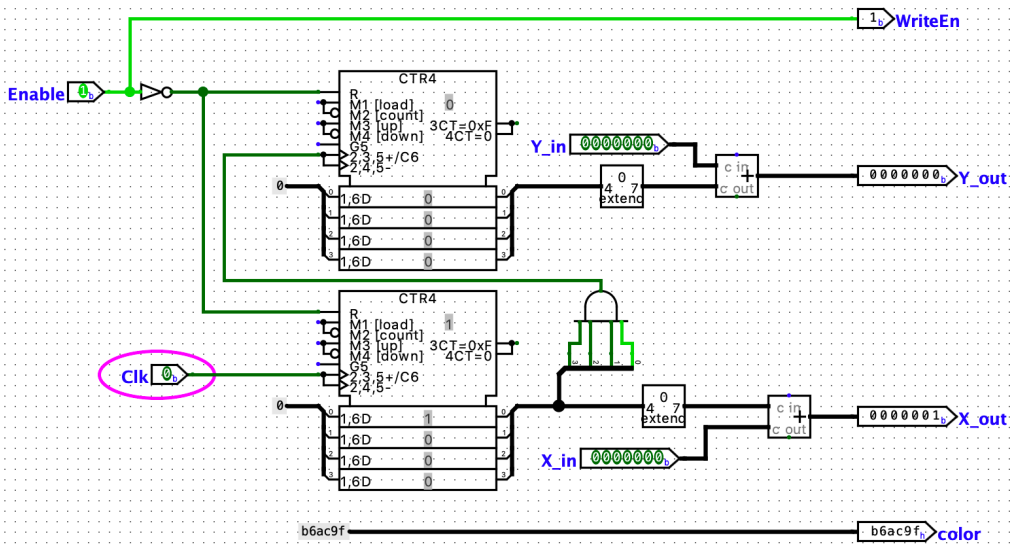
1. As we change X and Y, the new square will not be drawn.
2. Nothing will change on the RGB Video.
3. All images will be erased and the RGB video will be black.

1. Schematic of a datapath

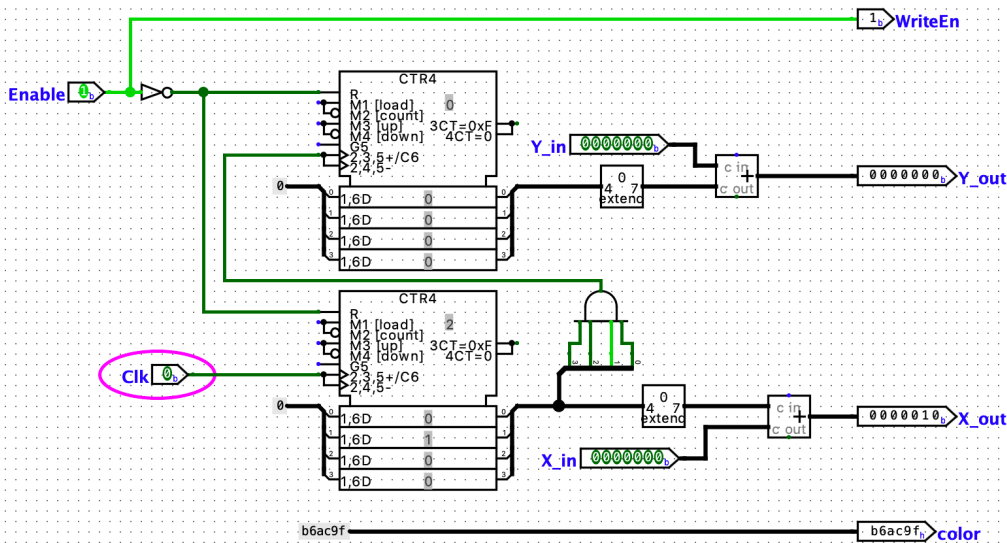




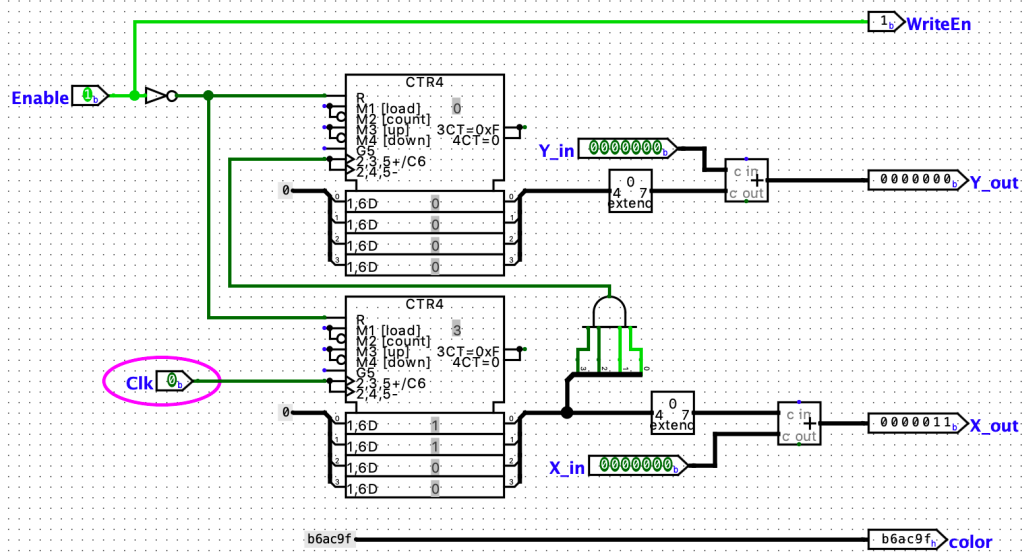
Simulation



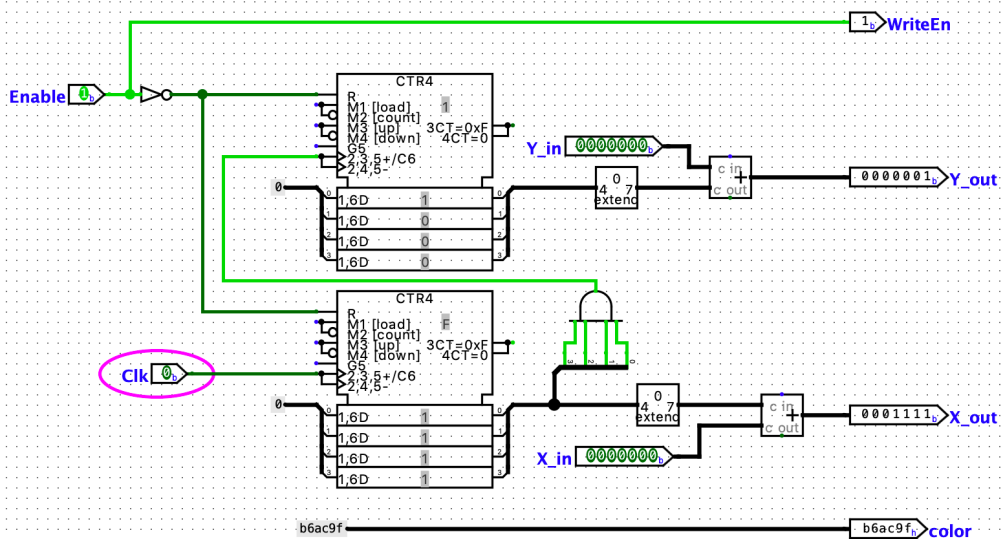
X_{out}: 0 → 1



X_{out}: 1 → 2



$X_{out}: 2 \rightarrow 3$

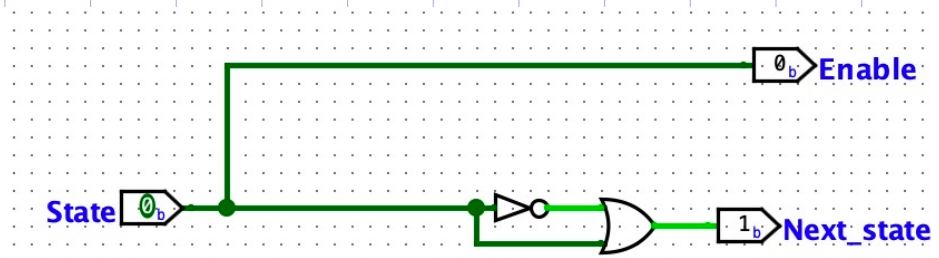
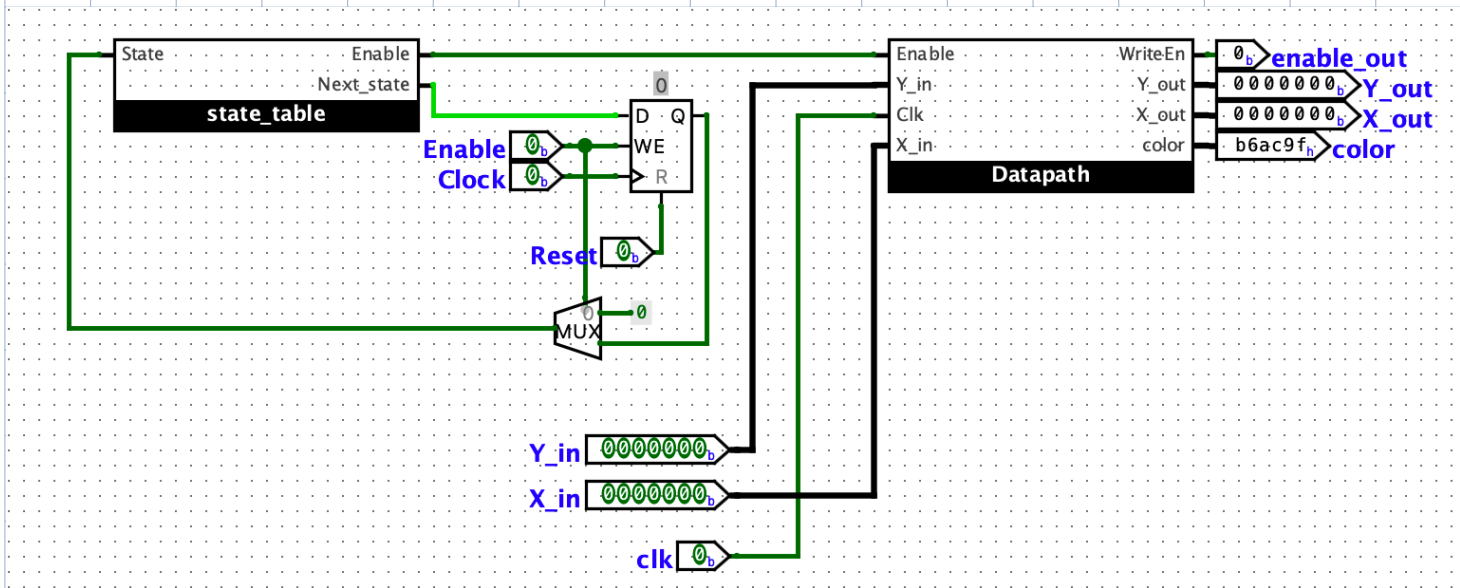


$X_{out}: 1111$



$Y_{out}: 0001$

2. FSM



3. Simulation

