

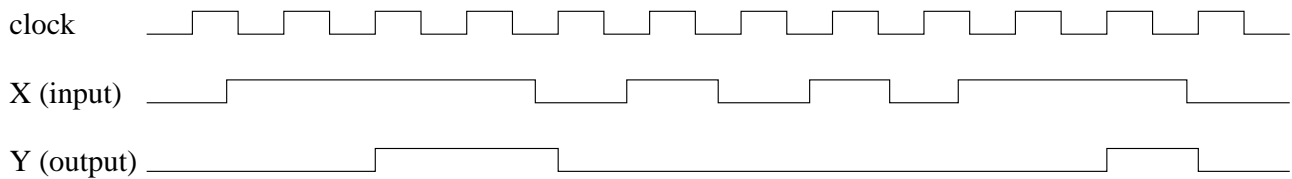
Design a Moore machine to detect the presence of two or more 1's in a serial bit stream (similar to the sequence detector discussed in class.) To do so,

1. Draw the state diagram.
2. Make the state assignment and write down the state table.
3. Determine the flip-flop and output equations.

Using the CircuitVerse simulator available at

<https://circuitverse.org/simulator>

to simulate this circuit. Show the functionality by creating a timing diagram as in the figure:



As your preliminary work, submit one file combining

- Your drawing and calculations for the state machine, diagram and, FF and output equations.
- Screenshot of your circuit.
- Screenshot of the timing diagram obtained from the simulator.

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