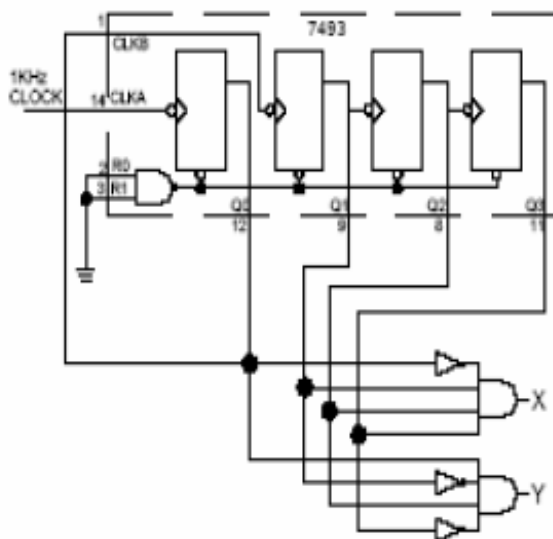


ET285 DIGITAL ELECTRONICS 2 HOMEWORK ASSIGNMENT #2

- 1) What counts are decoded in the figure below?
- X=2, Y=8
 - X=14, Y=5
 - X=12, Y=9
 - X=1, Y=10



- 2) A state machine (one that counts in a non-sequential manner) can be constructed from JK FFs with combinational logic gates connected to each input or it can be constructed from a programmable logic array such as the GAL16V8.
- True
 - False
- 3) The outputs of a decade counter are connected to a 3 stage binary counter. The frequency of the clock input to the decade counter is 1MHz. What is the frequency of the last binary counter stage output?
- 1 MHz
 - 500KHz
 - 250KHz
 - 12.5KHz

- 4) Show how the outputs of a 7493 counter can be connected to make a MOD-6 counter. Connect Q0 to CLKB and
- a) connect R0 to Q0 and R1 to Q1
 - b) connect R0 to Q1 and R1 to Q2
 - c) connect R0 to Q2 and R1 to Q3
 - d) connect R0 to Q1 and R1 to Q3

