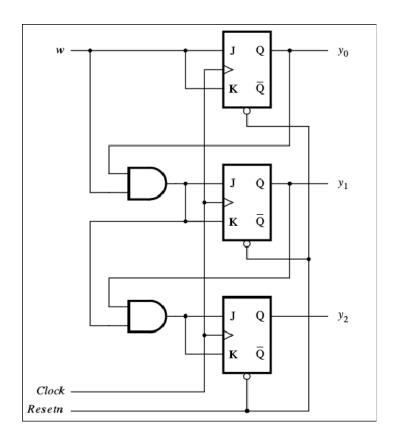# Exit Quiz -EE 231- Fall 2018

Name:_____

1. Fill the table with the counting sequence of the circuit below.
Assume that w = 1, and the initial values of the flip-flops as shown in table.

y_0	y_1	y_2
0	0	0

2. For The above circuit,
(a) Calculate the Maximum frequency of operation.
(b) Determine if there are hold time violations.
assume that:

$$w = 1, \quad t_{su} = 0.6 \text{ ns}, \quad t_h = 0.4 \text{ ns}, \quad 0.8 \le t_{cQ} \le 1.0 \text{ ns, and} \quad t_{gate} = 1 + 0.1k$$

where k is the number of input to the gates.