EE 252 Digital Electronics:

Name:_____

1. Implement the sequential circuit described by the state table below, using T Flip Flops

	Present state	Next state		Output
		$w = 0$	$w = 1$	
	y_2y_1	Y_2Y_1	Y_2Y_1	z
A	00	00	01	0
B	01	00	11	0
C	11	00	11	1
	10	*dd*	*dd*	*d*

2. Implement the same sequential circuit, using JK Flip Flops.

- If a flip-flop in state 0 is to remain in state 0, then $J = 0$ and $K = d$ (where d means that K can be equal to either 0 or 1).
- If a flip-flop in state 0 is to change to state 1, then $J = 1$ and $K = d$.

- If a flip-flop in state 1 is to remain in state 1, then $J = d$ and $K = 0$.
- If a flip-flop in state 1 is to change to state 0, then $J = d$ and $K = 1$.

3. - Design a counter that counts pulses on line w and displays the count in the sequence 0,2,1,5,0,2,.... Use JK flip-flops in your circuit.