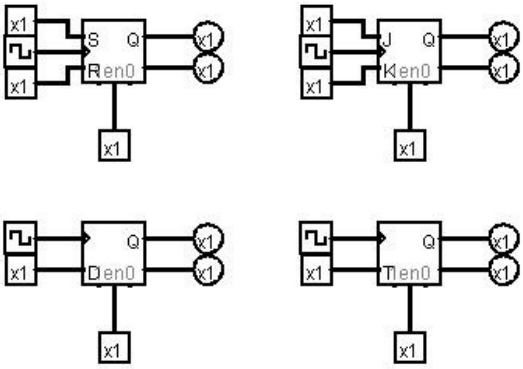
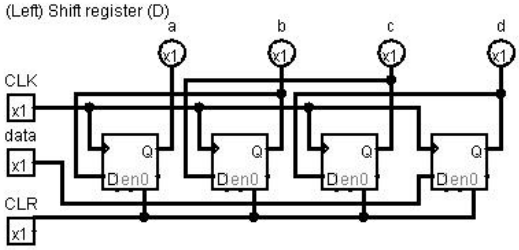
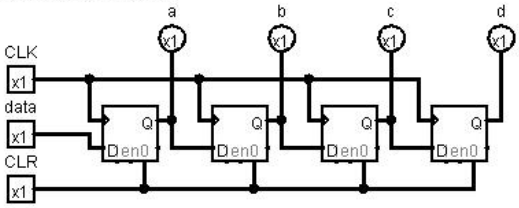
Flip-flops



(Left) Shift register (D)

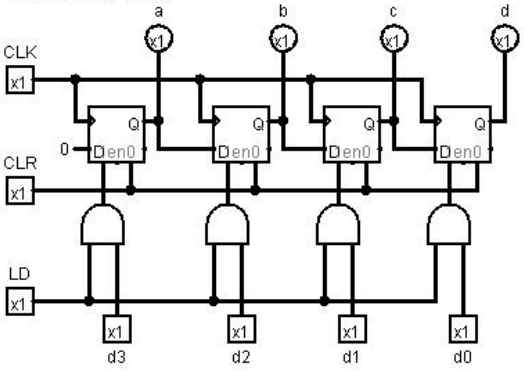


(Right) Shift register (D)



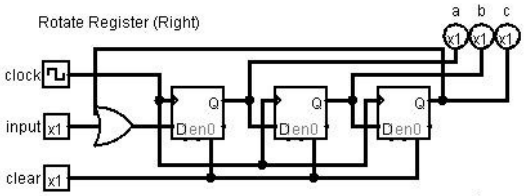
OPS: data - CLK

Parallel_In/Serial_Out

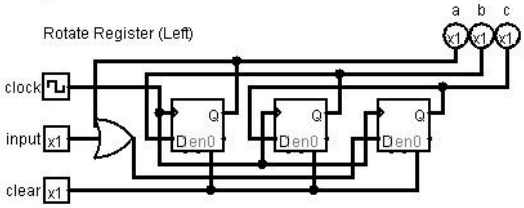


OPS: data - CLR - LD - CLK

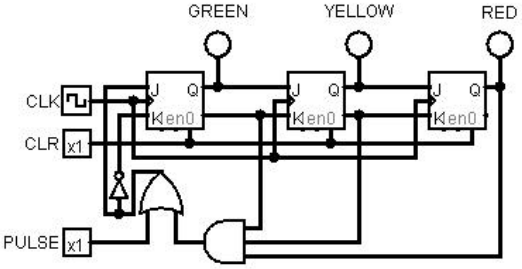
Rotate Register (Right)



Rotate Register (Left)

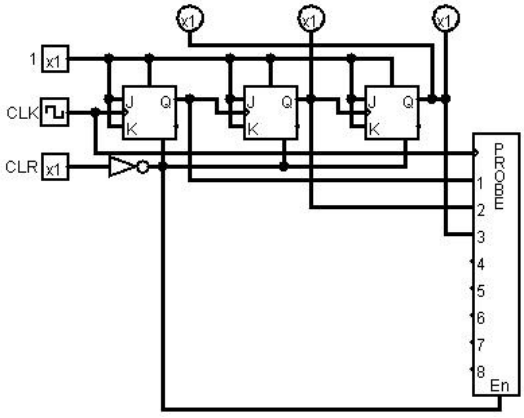


Semaphore

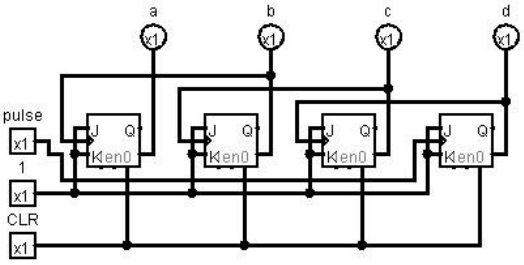


Operation: CLR - PULSE (UP) - CLK - PULSE (DOWN) - CLK ...

Frequency Division (by 2)

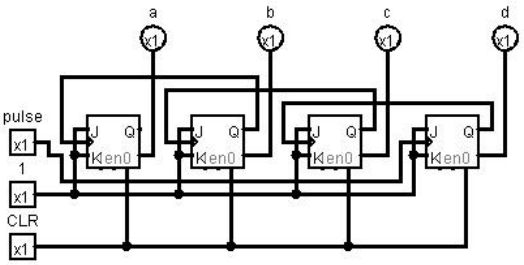


(Down) Asynchronous counter



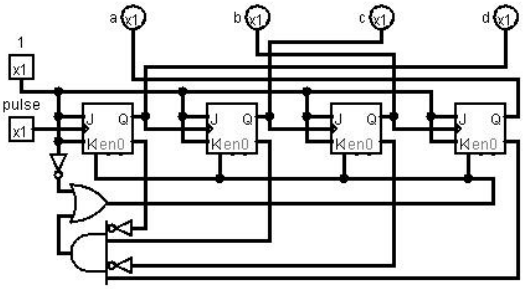
OPS: CLR - 1 - pulse

(Up) Asynchronous counter

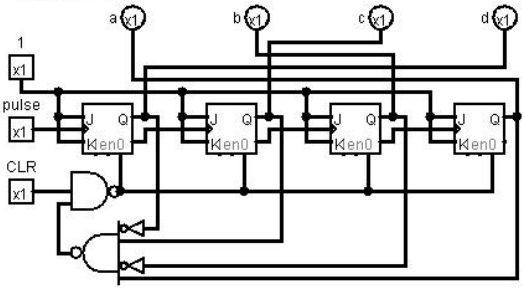


OPS: CLR - 1 - pulse

(Down) Decade counter

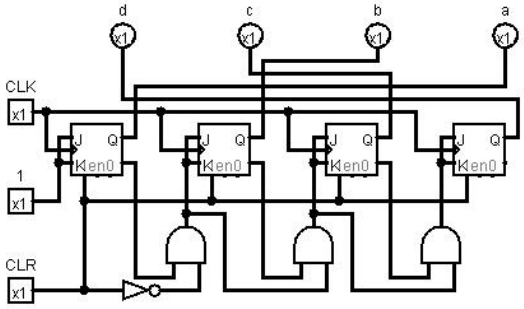


(Up) Decade counter



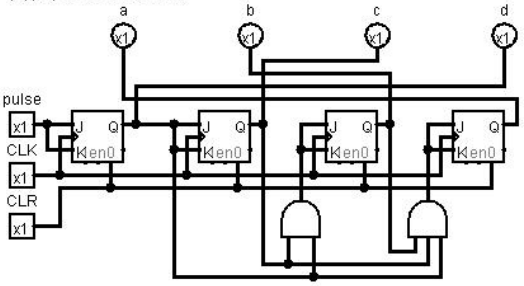
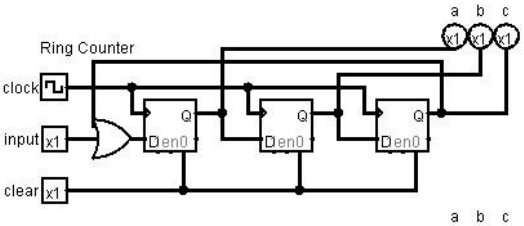
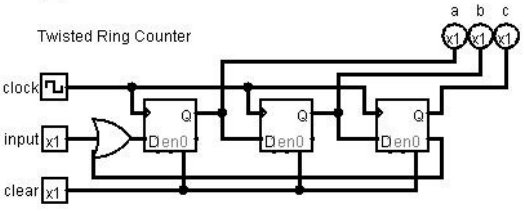
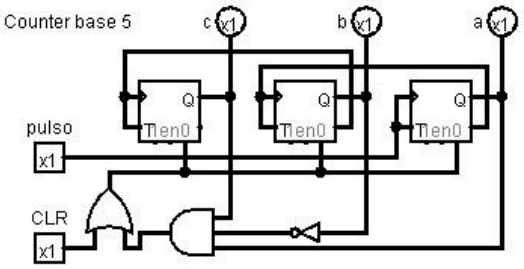
OPS: CLR - 1 - pulse

(Down) Synchronous counter



OPS: CLR - 1 - CLK

(Up) Synchronous counter



OPS: CLR - pulse - CLK