University of Colombo School of Computing

SCS 1205 - Computer System
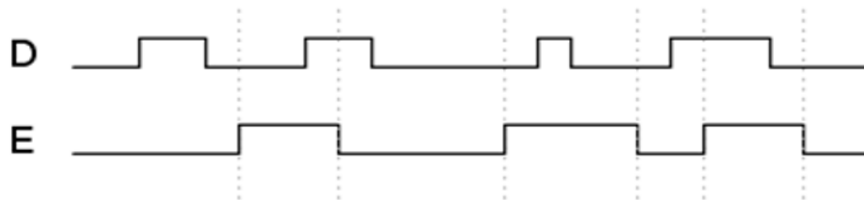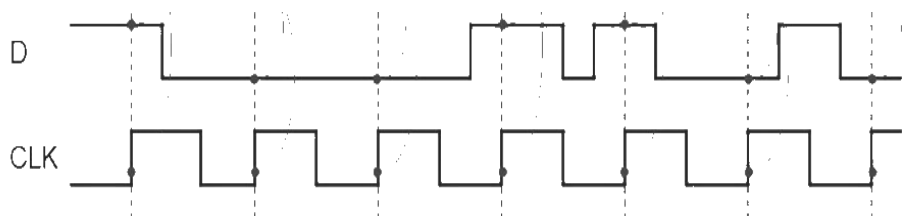

In class activity :

1. a. What is a sequential circuit?
    b. Compare and contrast combinational and sequential circuits?
    c. What are the examples of sequential circuits?
    d. Compare and contrast synchronous and asynchronous sequential circuits.

2. a. What is a clock signal? Explain.
    b. What are the 04 types of flip-flops and latches?
    c. Compare and contrast flip-flops vs latches.
    d. Compare and contrast clock signal vs Enable signal.

3. Complete the following timing diagram of D latch.
    Hint: E is the enable signal, Draw outputs as Q and Q'.

4. Complete the following timing diagram of positive edge sensitive D flip flop.
    Hint: CLK is the clock signal, Draw Q output.

5. Complete the timing diagram of positive edge sensitive JK flip flop.
    Hint : Draw Outputs as Q and Q'