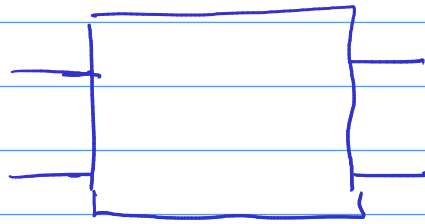


TUTORIAL #1



10 ns

$$y = \#50 (A \oplus B)$$

\int

$t=0$

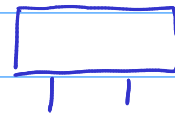
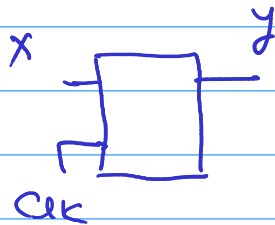
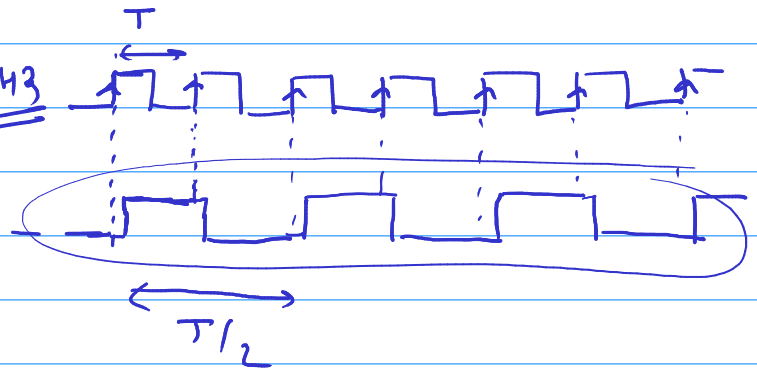
Δ

$y=0$

(a) (pos edge clk)

$$\underline{\underline{y}} = \sim y$$

2.443



(a) (pos edge clk)

$$\underline{\underline{y}} = \sim y$$

$\underline{\underline{y}} = \sim y$



(a) (pos edge y)

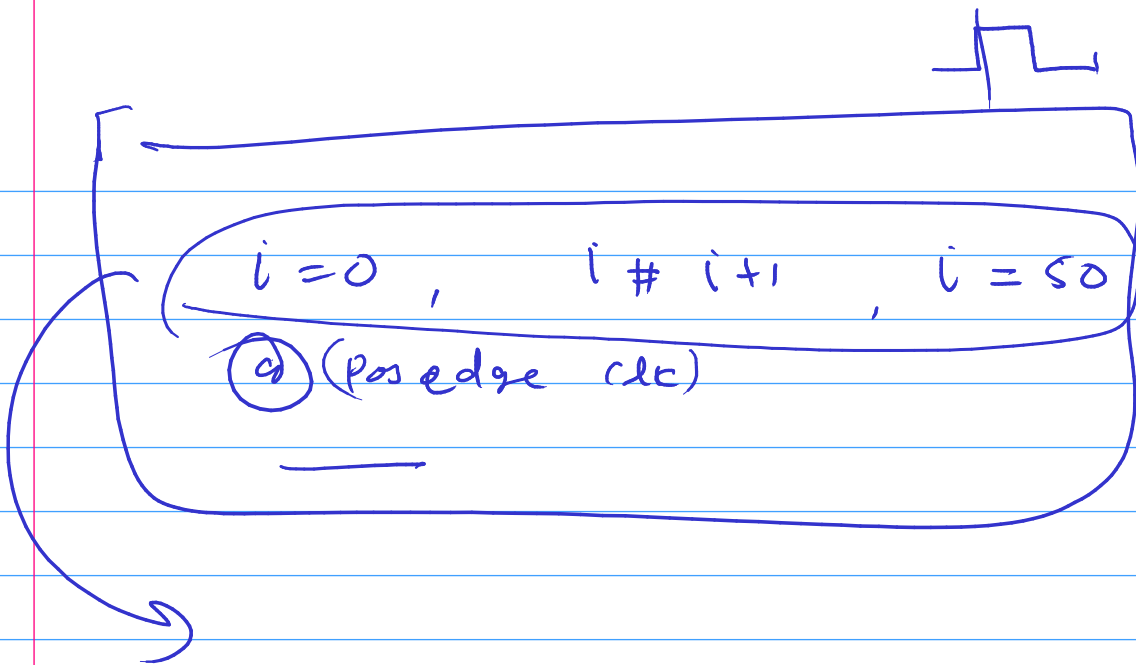
$$\underline{\underline{z}} = \sim z$$

—

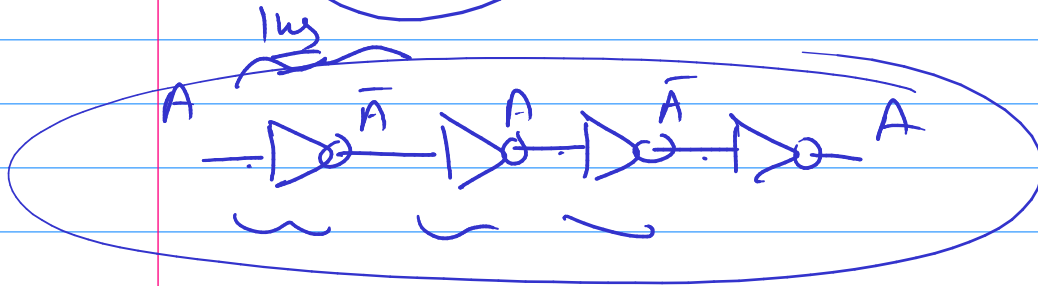
—

—

—



50



+



$$a = b$$

$$=$$

$$a == b$$

$$\begin{array}{r} 1101 \\ 1011 \\ \hline 1001 \end{array}$$

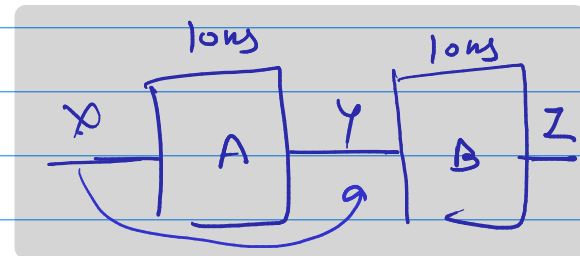
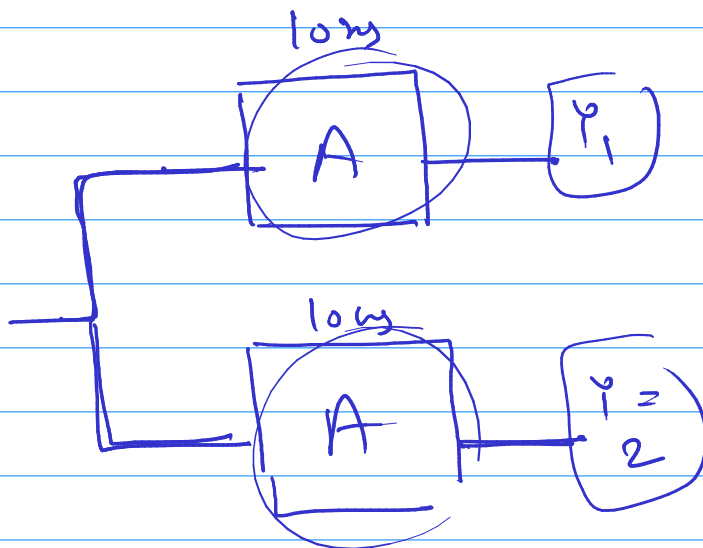
$$\begin{array}{r} 0 \\ a = b + c \\ 1 \quad 0 \\ \hline b \quad (+) \quad c \\ \hline \end{array}$$

$t=0$

$a=0$

$b=0$

$c=0$



↓

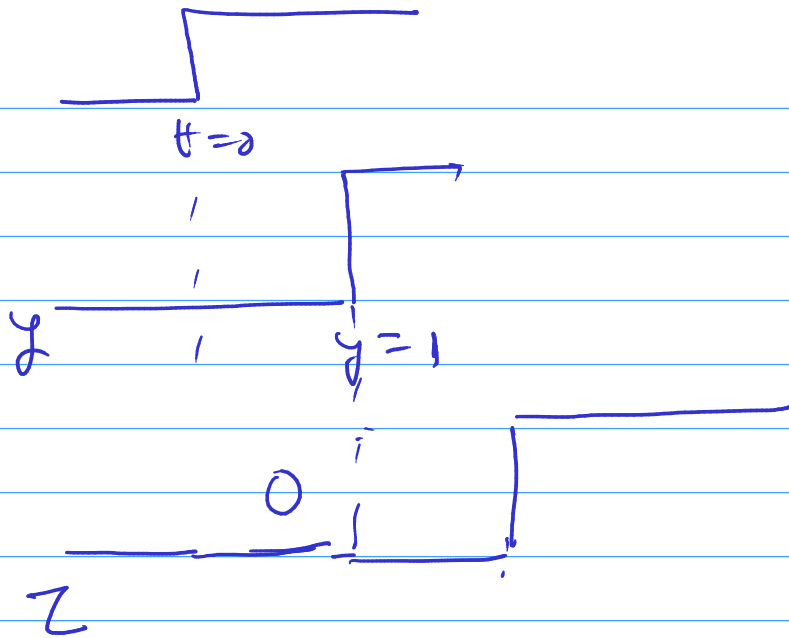
⑥ Σ_n

$$\begin{bmatrix} Y = X ; \\ Z = Y ; \end{bmatrix}$$

$$\begin{array}{l} Y = 1 \\ \boxed{Z = 1} \end{array}$$

1

$$\boxed{\delta = \delta}$$

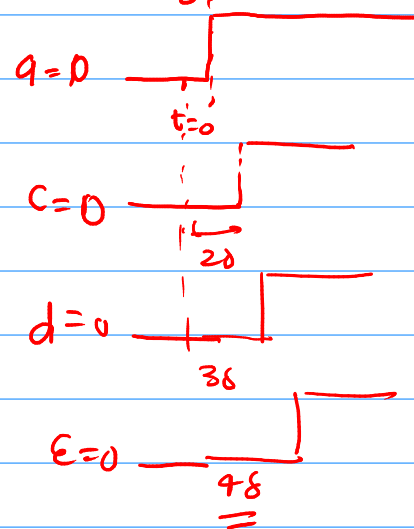


Module ($\overset{\text{inp}}{A}, \overset{\text{inp}}{B}, \overset{\text{oup}}{Y}$)

assign $(Y) = A \wedge B$

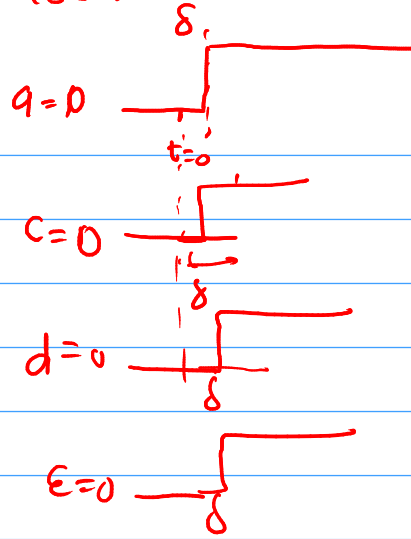
Blocking Assignments

$G = 1$;
 $C = 1$;
 $d = 1$;
 $E = 1$;



Non blocking assignment

$\rightarrow a \leftarrow 1$;
 $\rightarrow c \leftarrow 1$;
 $\rightarrow d \leftarrow 1$;
 $\rightarrow e \leftarrow 1$;



✓

$\rightarrow a = 1$
 $\rightarrow b = a$
 $\rightarrow c = b$

✓

$\rightarrow a \leftarrow 1$
 $\rightarrow b \leftarrow a$
 $\rightarrow c \leftarrow b$

$a = 0$
 $b = 0$
 $c = 0$

$a = 1$

$a = 1$

$b = 1$

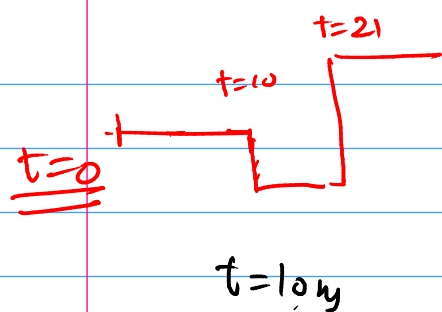
$b = 0$

$c = 1$

$c = 0$

$\#10$ $a = b$ ←

$a = \#10 . b$ ←
 $\#$



$$\underline{a \# 10 \ 0}$$

$$\underline{a \# 11 \ 1}$$

$$\underline{a \# 12 \ 0}$$

$$\underline{a \# 14 \ 1}$$

