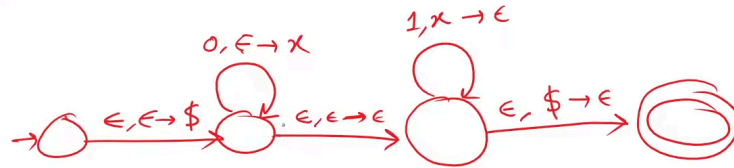
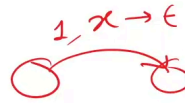
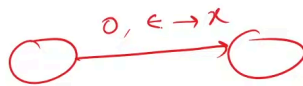
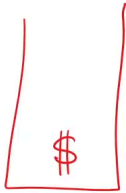
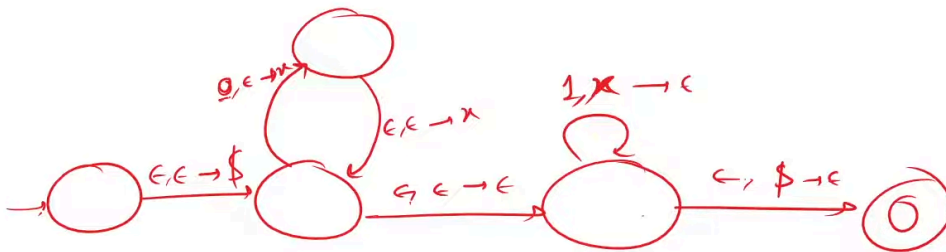
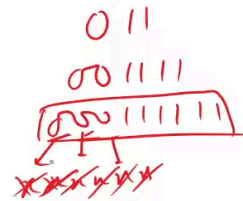


PDA

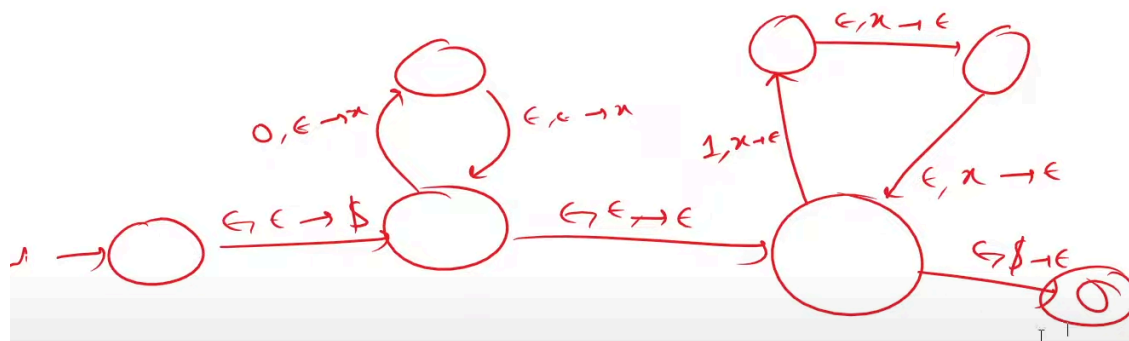


$0^n 1^{2n}$



$\{0^n 1^n\}$

00011

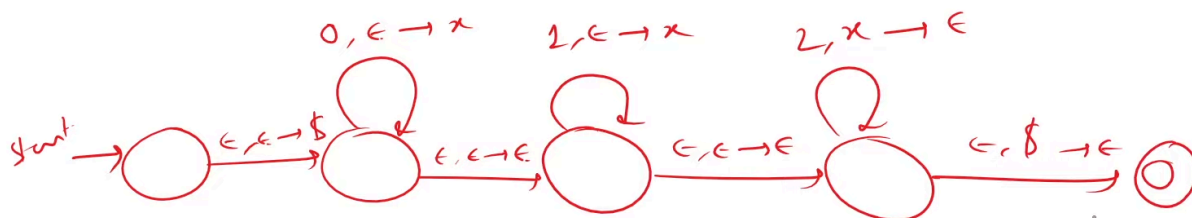


$\Sigma = \{0, 1, 2\}$

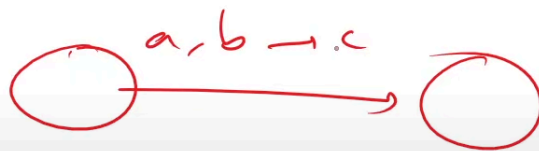
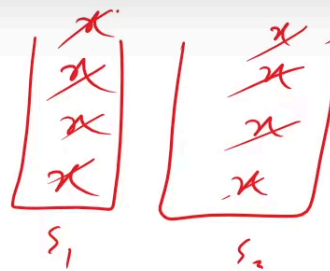
$0^i 1^j 2^k$

$i + j = k$

$\begin{matrix} x \\ x \\ x \\ x \\ \$ \end{matrix}$



$0^i 1^j 2^k$ $i=j=k$



PDA Examples

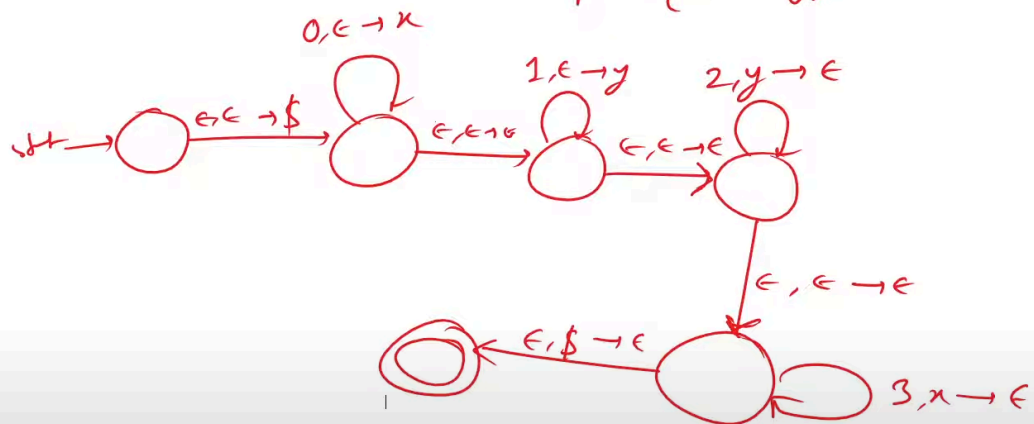
Pushdown Automata

Saturday, November 26, 2022 9:49 PM

$0^i 1^j 2^j 3^i$

$\Sigma = \{0, 1, 2, 3\}$

$\Gamma = \{\$, x, y\}$



palindrome

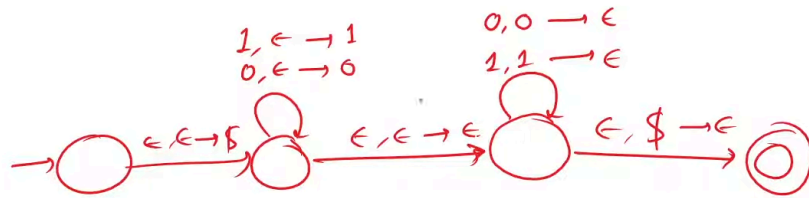
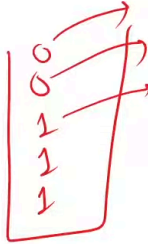


$$\Gamma = \{\$, 0, 1\}$$

w.wf

$$w \in \Sigma^*$$

~~(0110001)~~



$$w_1 \in (0|1)^*$$

$$\Sigma = \{0, 1\}$$

$$w_2 \in (0|1)^*$$

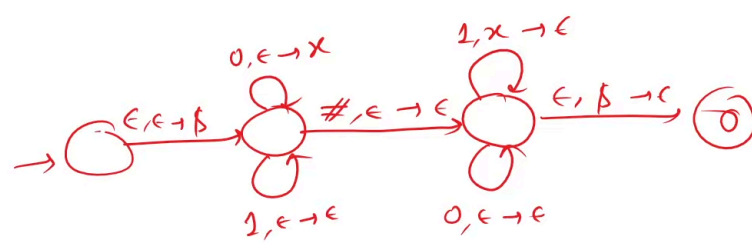
$$w_1 \# w_2$$

$$\Sigma = \{0, 1, \#\}$$

$$(0|1)^* \# (0|1)^*$$

101110011#1110000

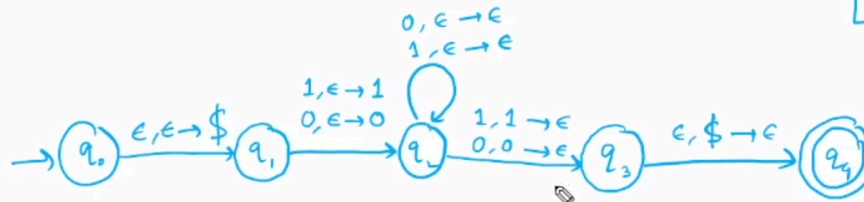
$$\text{no. of 0's in } w_1 = \text{no. of 1's in } w_2$$



$\Sigma = \{0,1\}$

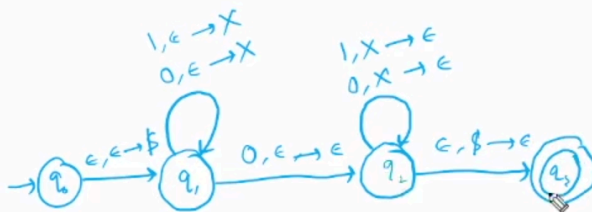
$\{w \in \{0,1\}^* \mid w \text{ starts and ends with the same symbol}\}$

00
11
0(01001
0(111000110



$\{w \in \{0,1\}^* \mid w \text{ is of odd length and has 0 as its middle symbol}\}$

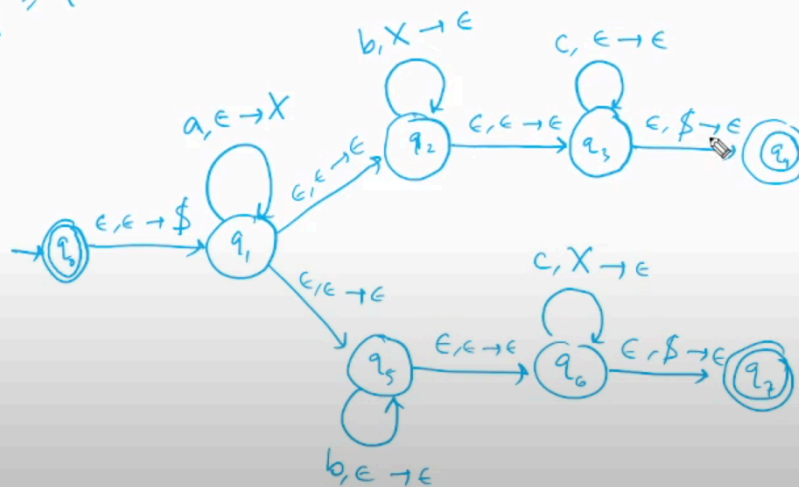
0
100
11100010111111
xxxxx ↑
\$



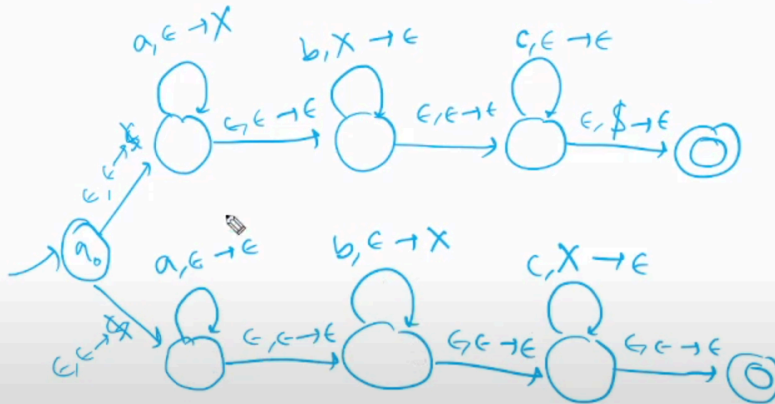
$\Sigma = \{a, b, c\}$
 $\Gamma = \{\$, X\}$

$A = \{a^i b^j c^k \mid i, j, k \geq 0 \text{ and } i=j \text{ or } i=k\}$

aabbbcc
aaabbbcc
aaaabbbcc



$$A = \{a^i b^j c^k \mid i, j, k \geq 0 \text{ and either } i = j \text{ or } j = k\}.$$



$aaabbbcc$
 $aaabbbcc$

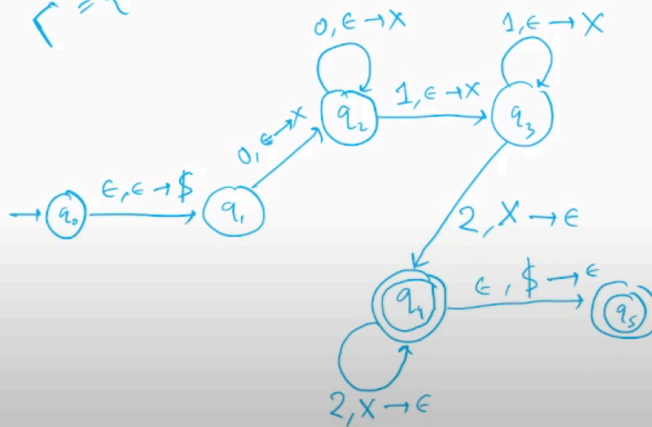
U

Set background Clear frame

Open on a Jar

$\Sigma = \{0, 1, 2\}$
 $\Gamma = \{X, \$\}$

$$L = \{0^i 1^j 2^k \mid i+j \geq k \text{ and } i, j, k > 0\}$$



00111 22222 ②

\$

Activate Windows