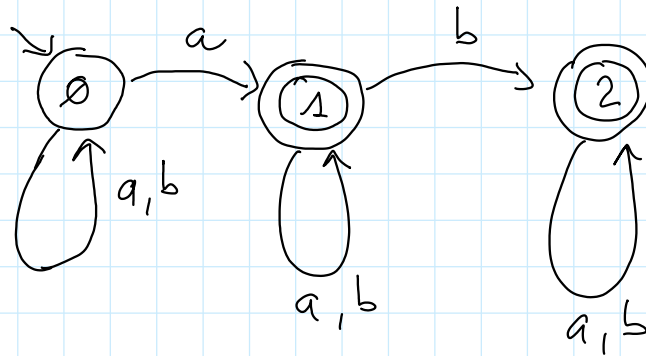


$$\mathcal{L} = \{a, b\}$$

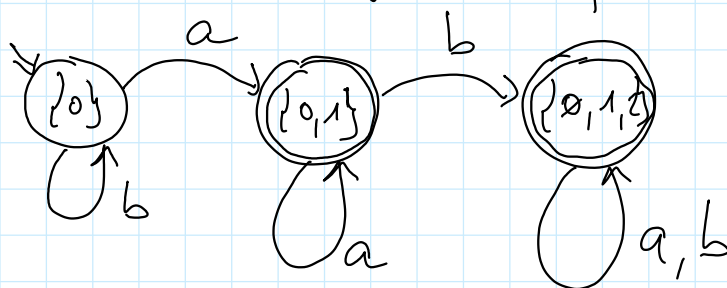
dato l'ASF



- 1) indicare formalmente il linguaggio riconosciuto
- 2) costruire l'ASFD equivalente

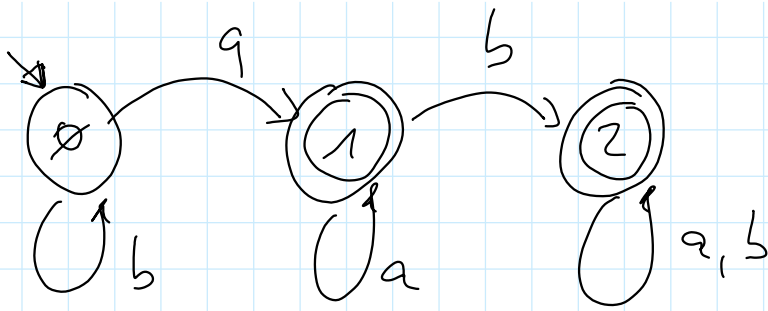
$$L = \{ \alpha a \beta \mid \alpha, \beta \in \mathcal{L}^* \} \quad a \in L$$

	a	b
$\{\emptyset\}$	$\{\emptyset, 1\}$	$\{\emptyset\}$
$\{\emptyset, 1\}$	$\{\emptyset, 1\}$	$\{\emptyset, 1, 2\}$
$\{\emptyset, 1, 2\}$	$\{\emptyset, 1, 2\}$	$\{\emptyset, 1, 2\}$



$bbb \notin L$



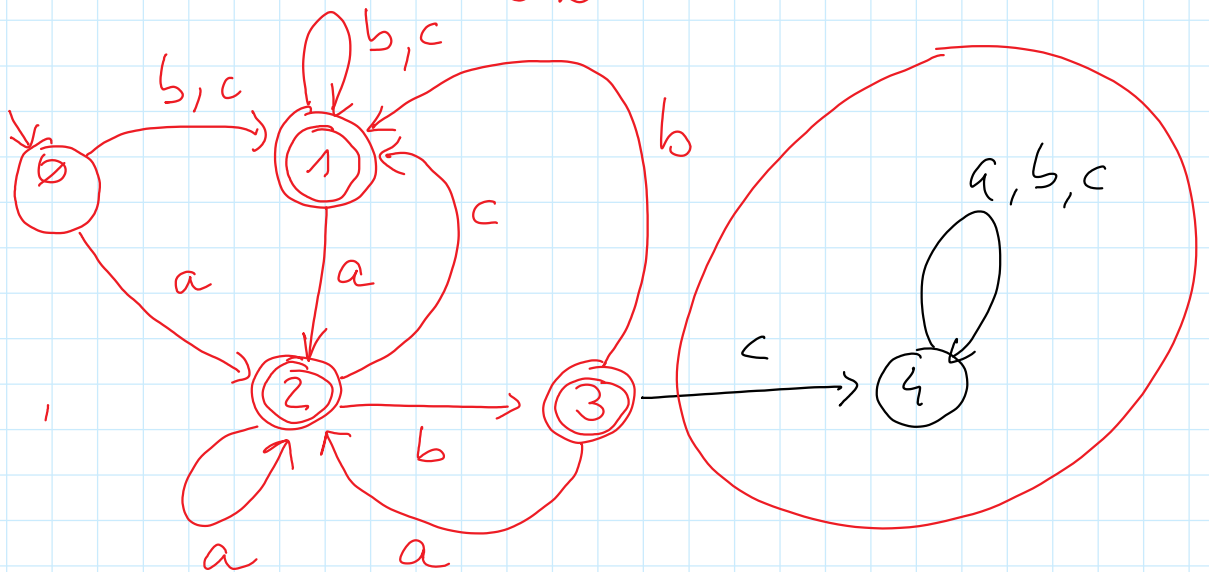


$$\Sigma = \{a, b, c\}$$

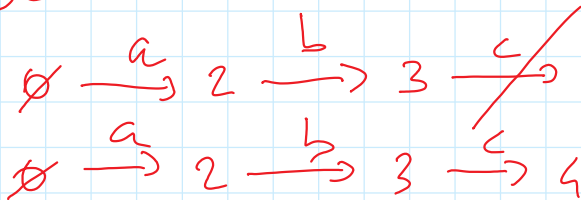
$$L = \{ \alpha \mid \alpha \in \Sigma^+ \wedge abc \notin \alpha \}$$

$\alpha \alpha \beta$ ne esistono $\gamma, \delta \in \Sigma^*$ tali che $\beta = \gamma \alpha \delta$ // sottostituisce

$abc \quad \alpha \quad \underline{aa} bca$
 $abc \quad \not\alpha \quad cabab$
 $abc \quad \alpha \quad \underline{abcc}$

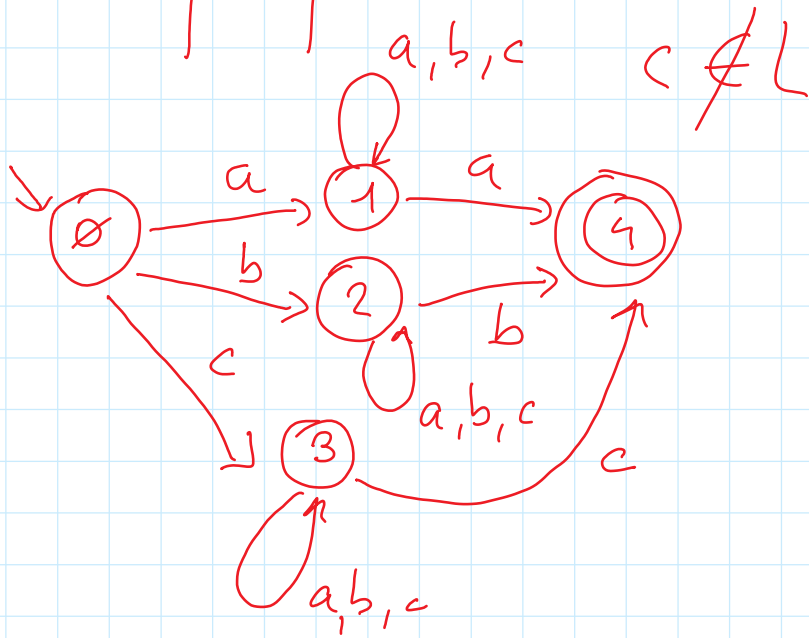


abc

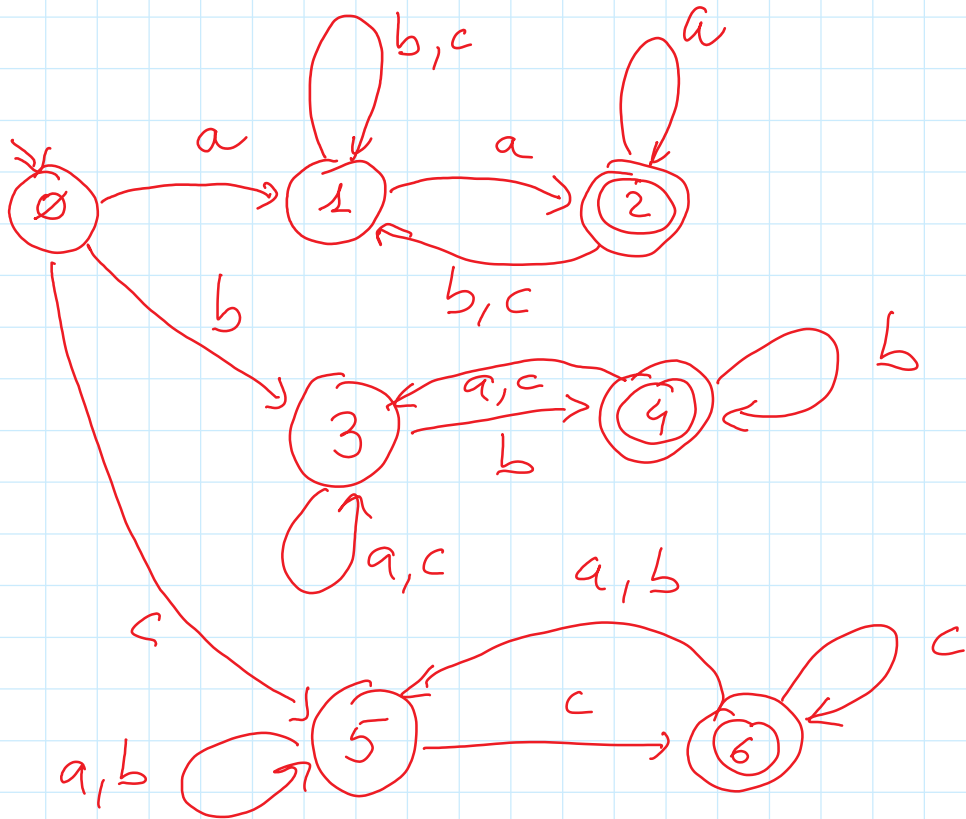


$$\Sigma = \{a, b, c\}$$

$$L = \{xax \mid x \in \Sigma \wedge a \in \Sigma^*\}$$



$aa \in L$

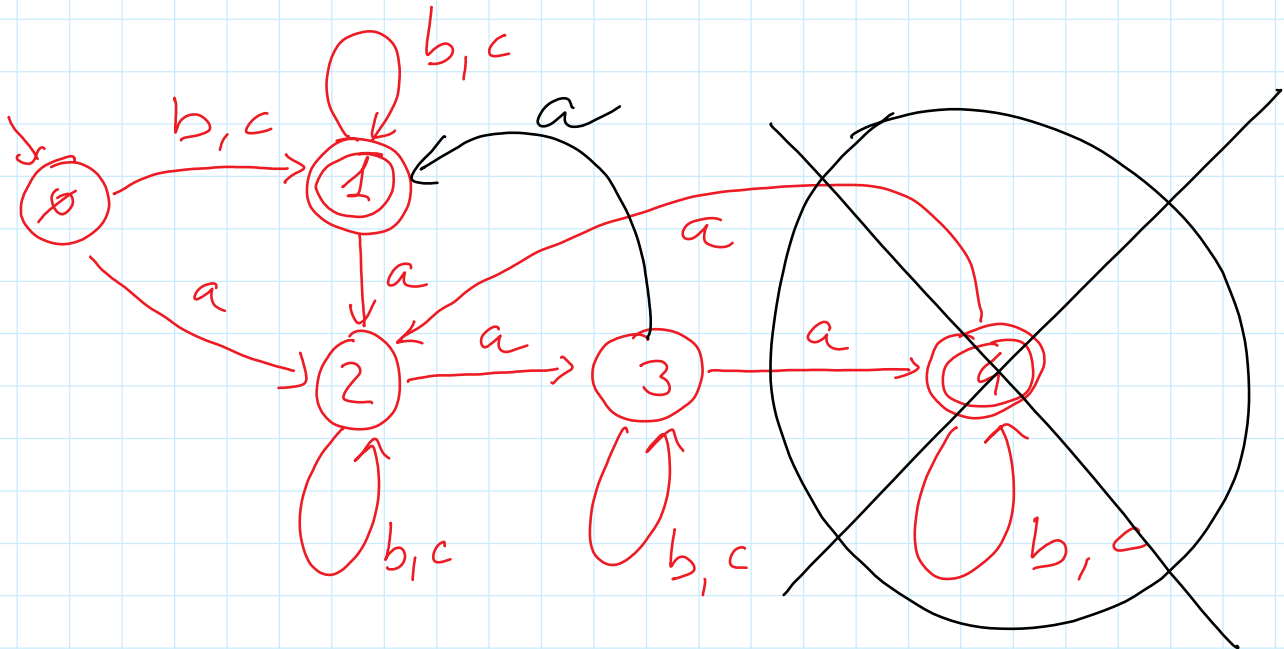


$$\Sigma = \{a, b, c\}$$

automa deterministico

$$L = \{ \alpha \mid \alpha \in \Sigma^+ \wedge |\alpha|_a \pmod 3 = 0 \}$$

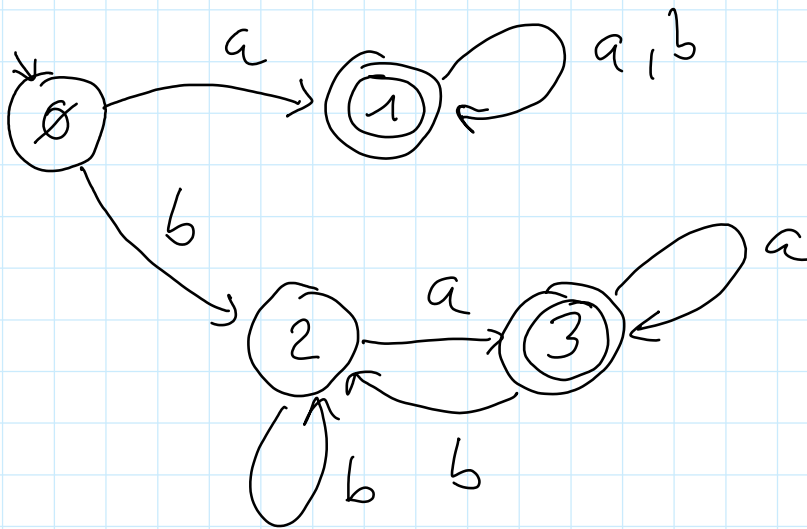
$|\alpha|_a$ il numero di simboli a che
occorrono (compaiono) in α



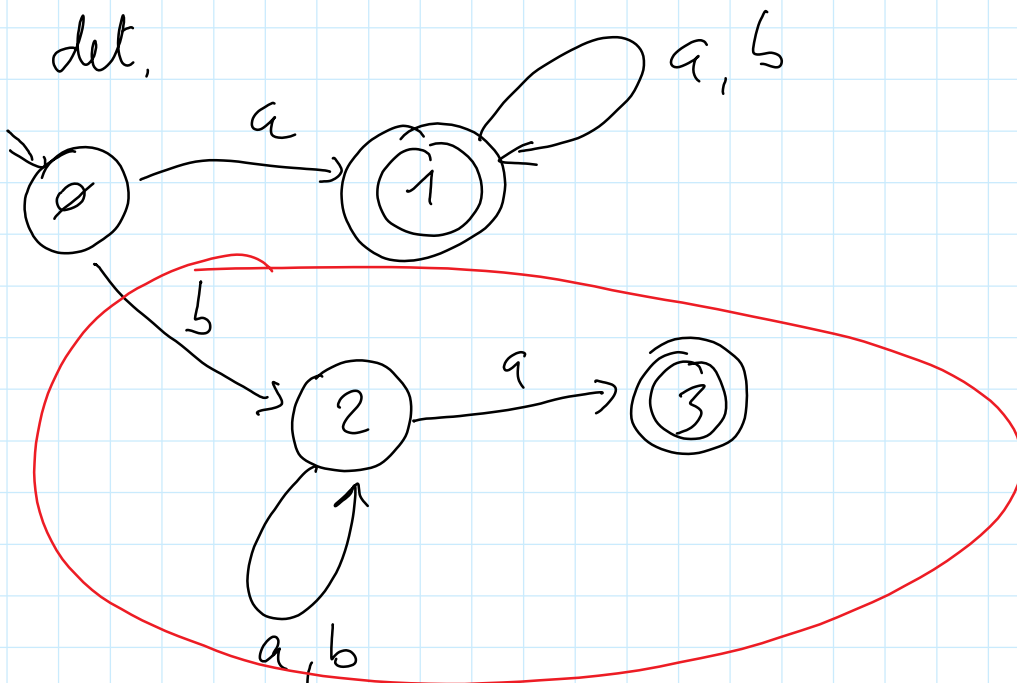
$$\Sigma = \{a, b\}$$

$$L = \{ \alpha a \mid \alpha \in \Sigma^* \} \cup \{ a \alpha \mid \alpha \in \Sigma^* \}$$

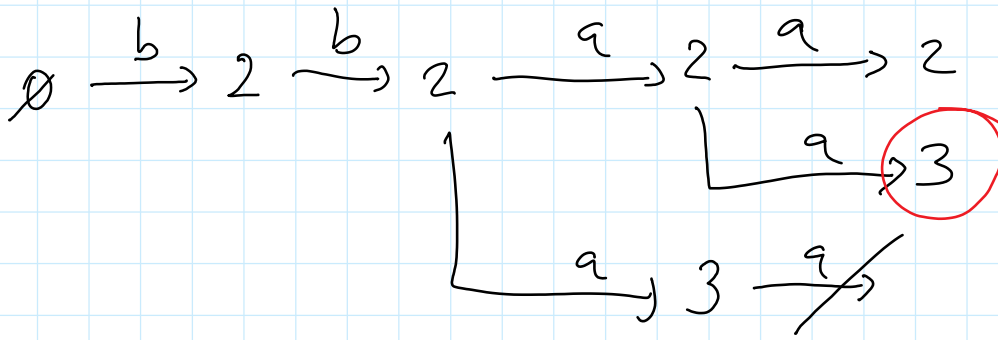
$ab \in L$ $abb \in L$
 $bab \notin L$ $aba \in L$



Non det.

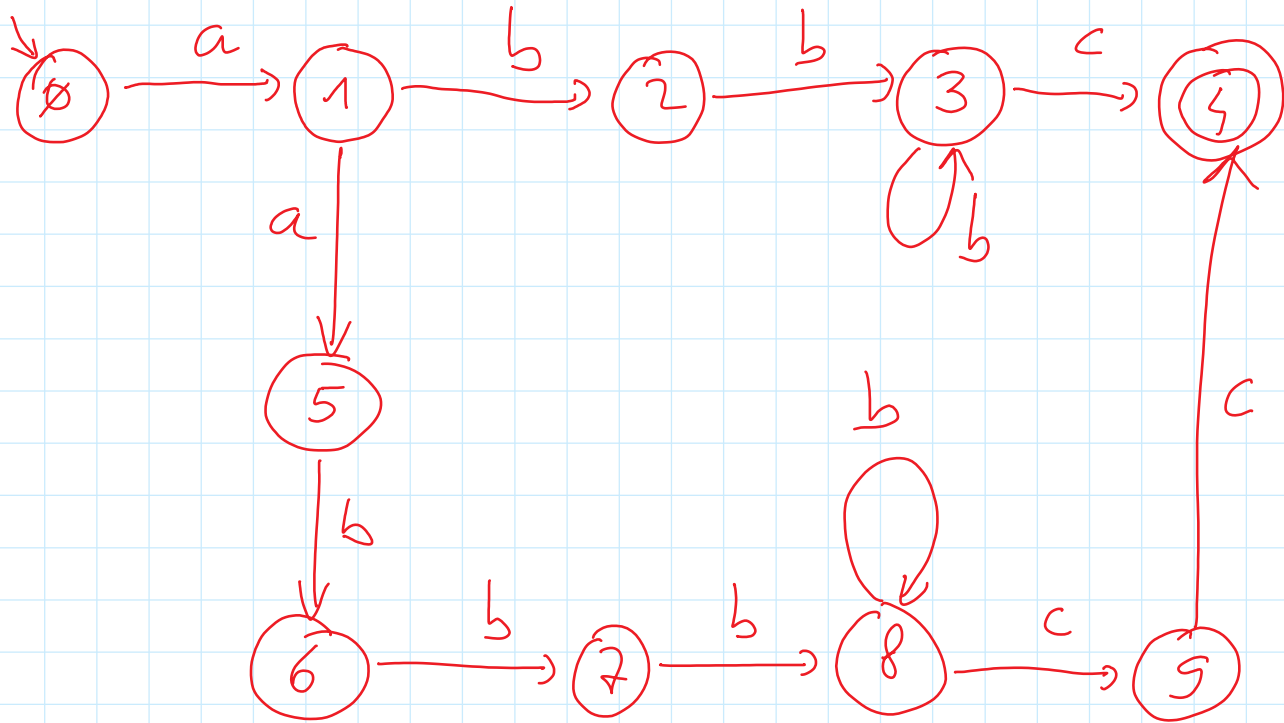


bbaa



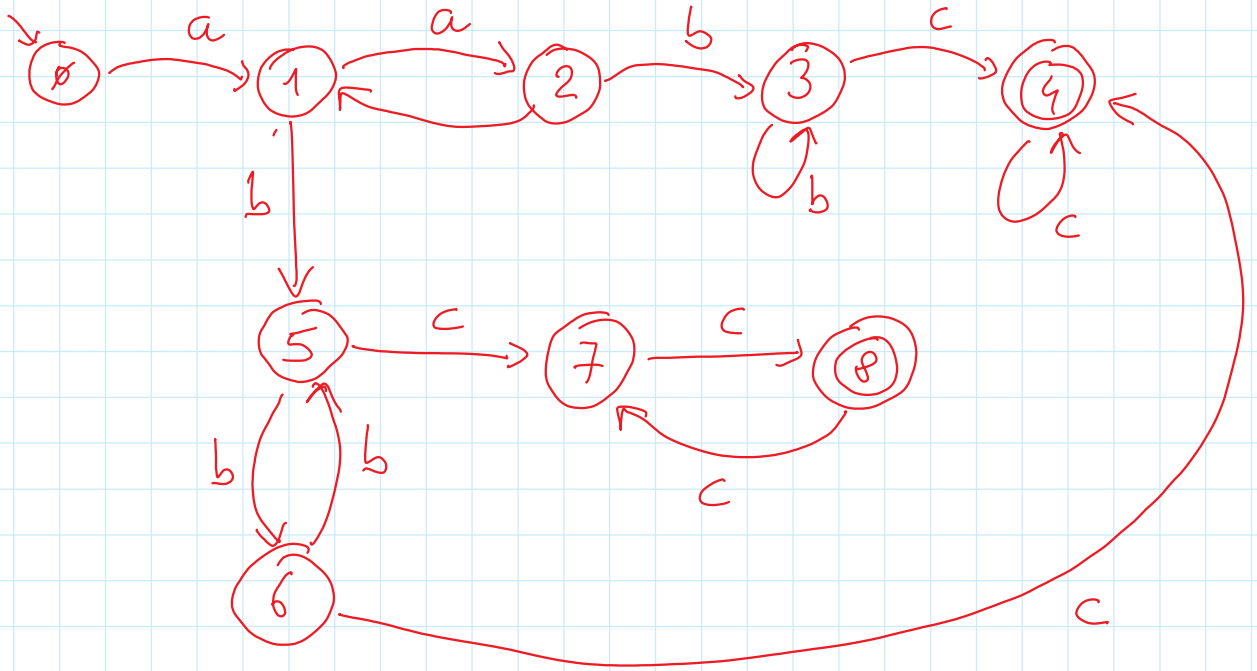
$$\Sigma = \{a, b, c\}$$

$$L = \{ a^m b^m c^m \mid 0 < m < 3 \wedge m < pm \}$$



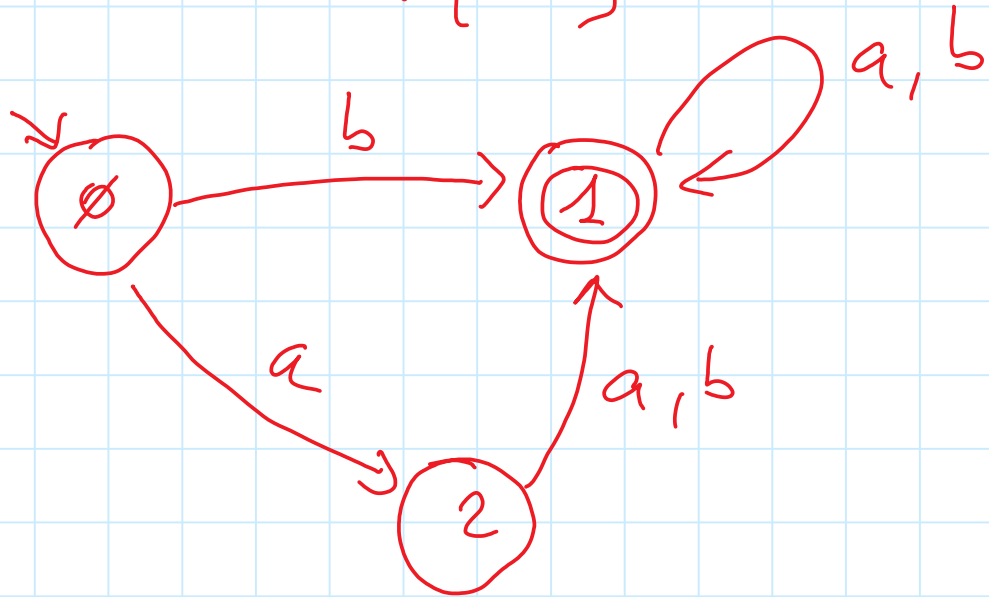
$$\Sigma = \{a, b, c\}$$

$$L = \{ a^m b^m c^k \mid m, m, k > 0 \wedge (m \cdot m \cdot k) \pmod 2 = 0 \}$$



$$\Sigma = \{a, b\}$$

$$L = \Sigma^+ \setminus \{a\}$$



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

$$L = \left\{ \alpha\beta \mid \begin{array}{l} \alpha, \beta \in \Sigma^+ \\ \alpha \text{ non decrescente} \\ \beta \text{ non crescente} \end{array} \right\}$$

1 2 2 2 1
 α β

1 2 2 2 1
 α β

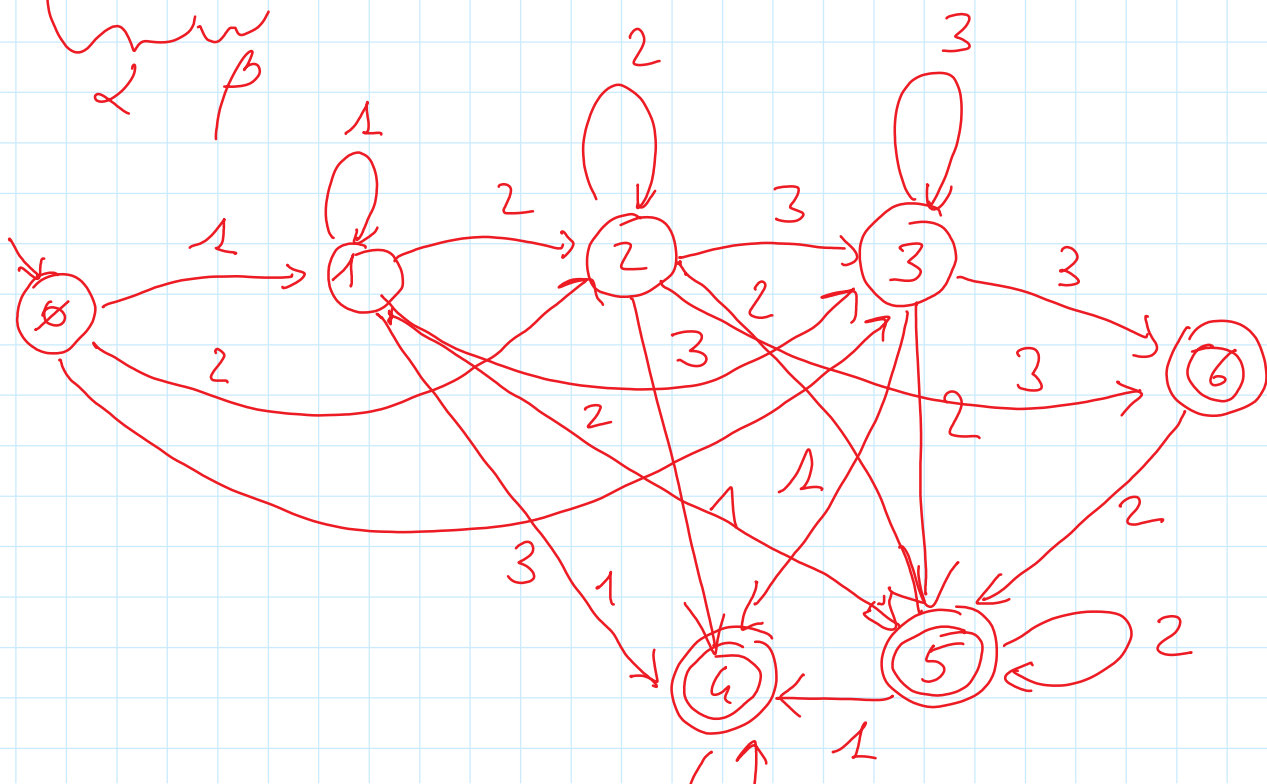
1 2 2 2 1
 α β

1 2 2 2
 α β

2 2 2 1
 α β

1 2 3 2 3 $\notin L$

1 2 3 2
 α β



\vec{O}_1