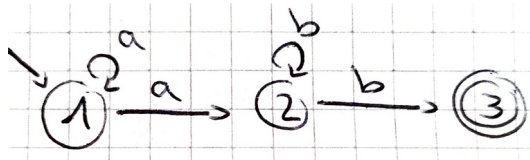


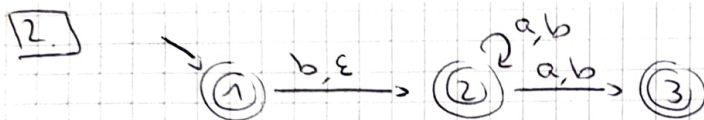
SOLUZIONI APPELLO 2022-01

1.
SÌ.

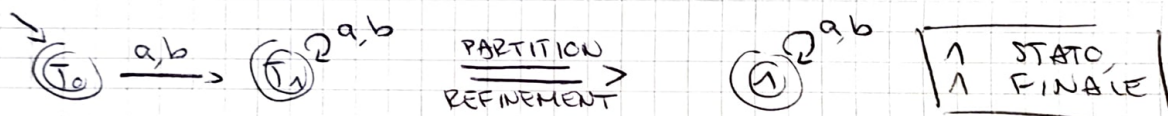
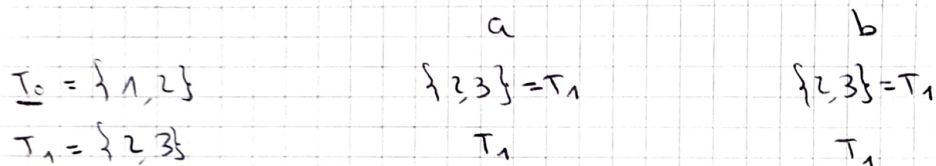
Di seguito è riportato un automa a stati finiti in grado di accettare il linguaggio.



2.

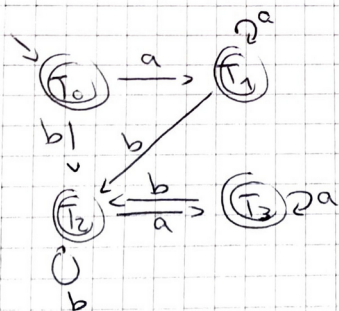
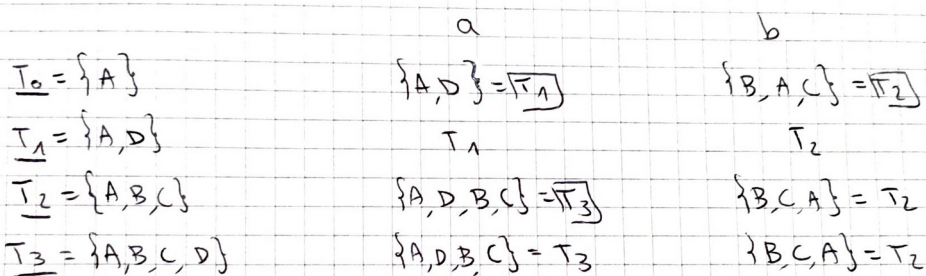


<SUBSET CONSTRUCTION>



3.

3.



4 STATI, 4 FINALI.

4.
SÌ.

5.

	a	b	c	\$
S	$S \rightarrow \epsilon$ $S \rightarrow aSbs$	$S \rightarrow \epsilon$ $S \rightarrow bsas$	$S \rightarrow cA$	$S \rightarrow \epsilon$

6.

0) - $S' \rightarrow \cdot S$ \$ (a, 1)
 $S \rightarrow \cdot aSbS$ \$
 $S \rightarrow \cdot bSaS$ \$
 $S \rightarrow \cdot cA$ \$
 $S \rightarrow \cdot$ \$ RED.

2 - $S \rightarrow aS \cdot bS, \$ (b, 3)$

3) - $S \rightarrow aSb \cdot S, \$$
 $S \rightarrow \cdot aSbS, \$$
 $S \rightarrow \cdot bSaS, \$$
 $S \rightarrow \cdot cA, \$$
 $S \rightarrow \cdot, \$$ RED.

$$I[aSb] = \{ [S \rightarrow aSb, S, \{\}] ,$$

7.

0) - $\delta' \rightarrow \cdot s$ \$ (b, n)
 $s \rightarrow \cdot asbs$ \$
 $s \rightarrow \cdot bsas$ \$
 $s \rightarrow \cdot cas$ \$
 $s \rightarrow \cdot$ \$ RED.

1) - $S \rightarrow b \cdot S a S, g$ (b, 2)
 $S \rightarrow \cdot a S b S, a$
 $S \rightarrow \cdot b S a S, a$
 $S \rightarrow \cdot c A, a$
 $S \rightarrow \cdot a, \text{RED.}$

2) - $S \rightarrow b \cdot S a S, a$
 $S \rightarrow \cdot a S b S, a$
 $S \rightarrow \cdot b S a S, a$
 $S \rightarrow \cdot c A, a$
 $S \rightarrow \cdot a, \text{RED.}$

$T[\text{SEbb}]a$ contiene un conflitto di SHIFT/REDUCE.
La riduzione coinvolta è $rh: S \rightarrow \epsilon$

8.

Essendo TUTTI e SEI i conflitti risolti a favore del REDUCE, ogni operazione deve essere IMMEDIATAMENTE valutata da Sx verso Dx.

Siccome 'cnanbcn' appartiene al linguaggio, la valutazione di 'c1a2bc3' produce

-3.

