



23922 - ROMA - Part. del frammento di bassorilievo, rappres. le Stagioni - Museo Vaticano Ripr. int. - Andersen

Precisazioni unioni e intersezione automi

Per studenti 2020

Chiusura rispetto intersezione

automa M_1

DFA per L_1

automa M_2

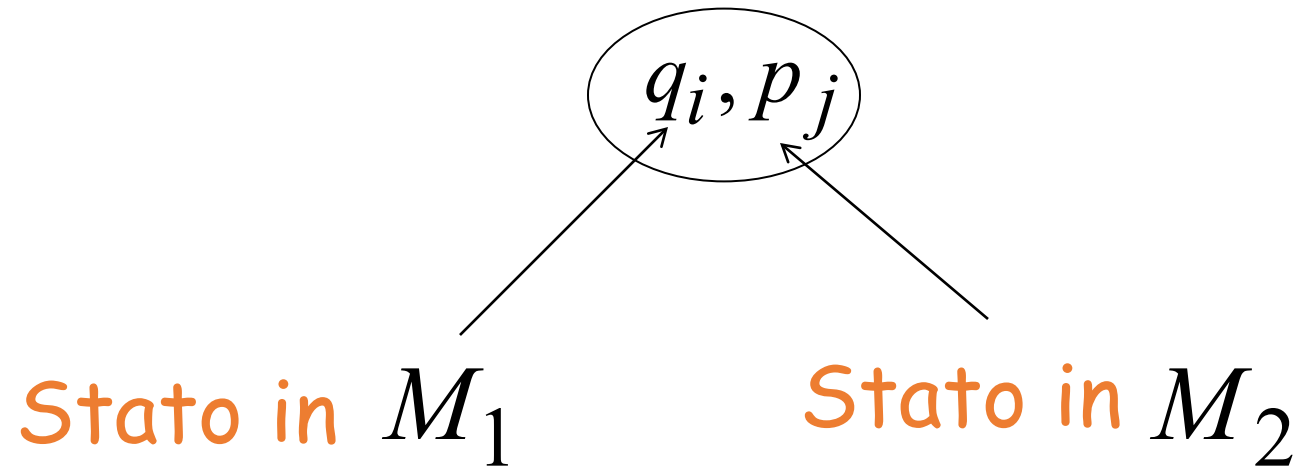
DFA per L_2

«Automati completi»

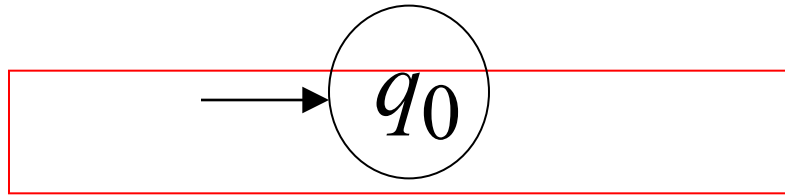
Costruiamo un DFA M che accetta $L_1 \cap L_2$

M Simula in parallelo M_1 e M_2

Stati in M

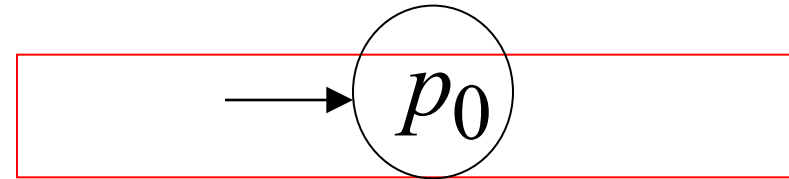


DFA M_1



stato iniziale

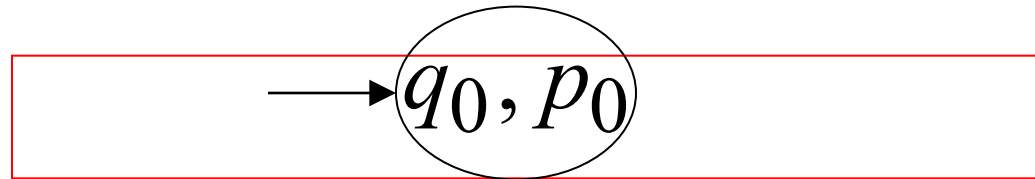
DFA M_2



stato iniziale

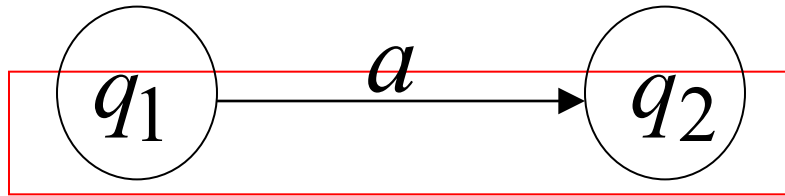


DFA M



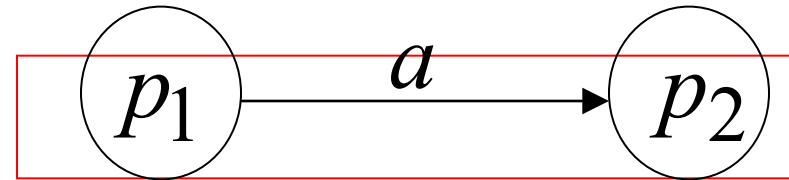
nuovo stato iniziale

DFA M_1



transizione

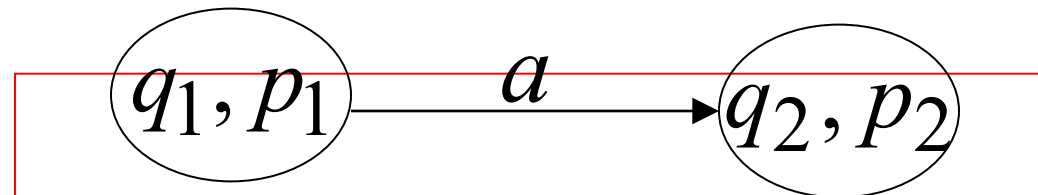
DFA M_2



transizione

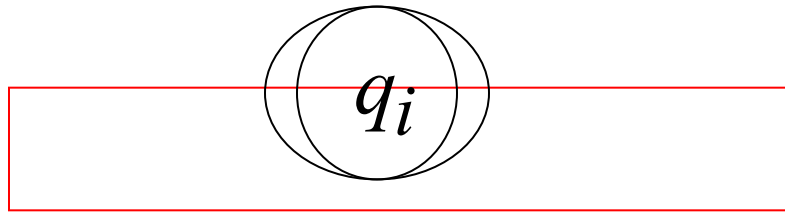


DFA M



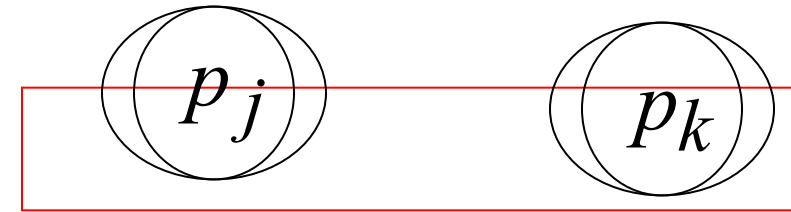
Nuova transizione

DFA M_1



accettazione stato

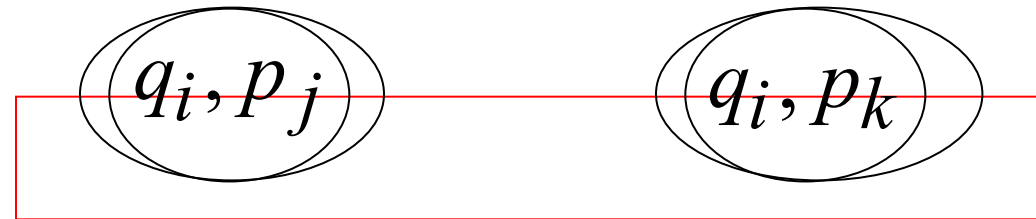
DFA M_2



accettazione stati



DFA M

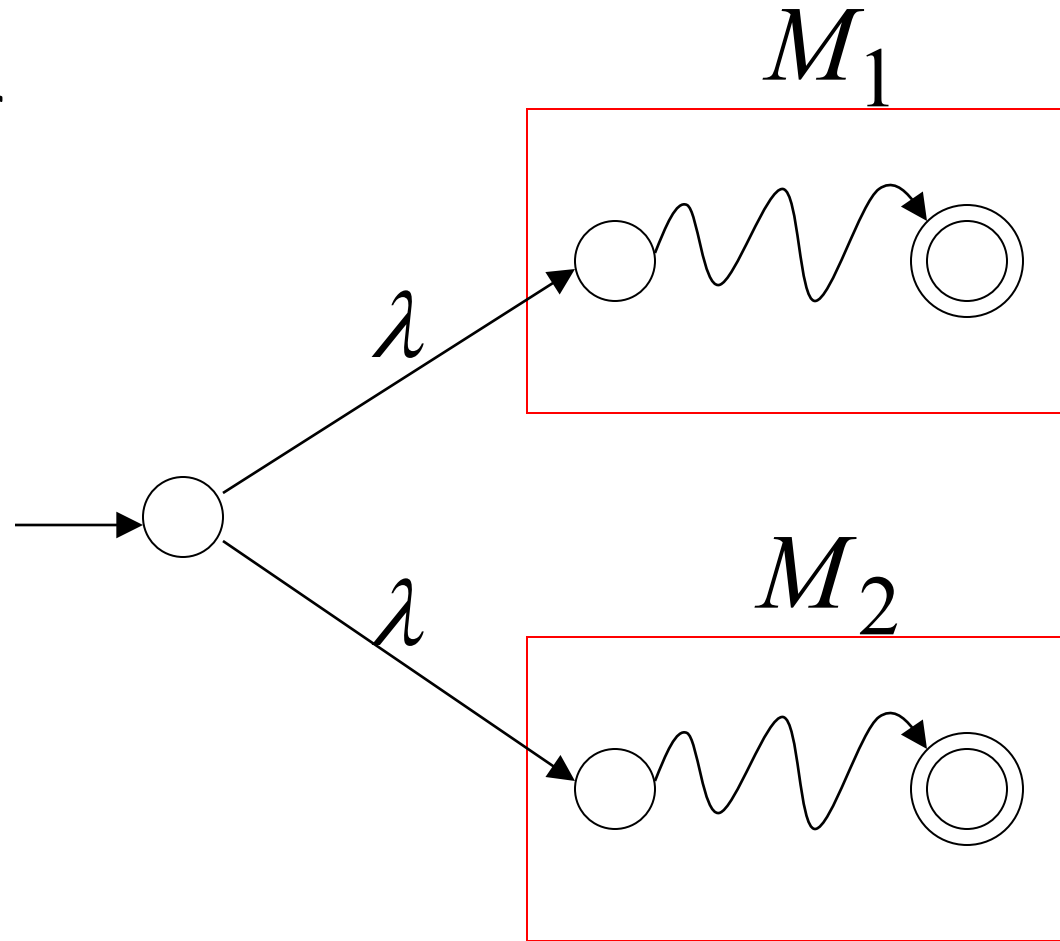


nuovo accettazione stati

Unione

$$L_1 \cup L_2$$

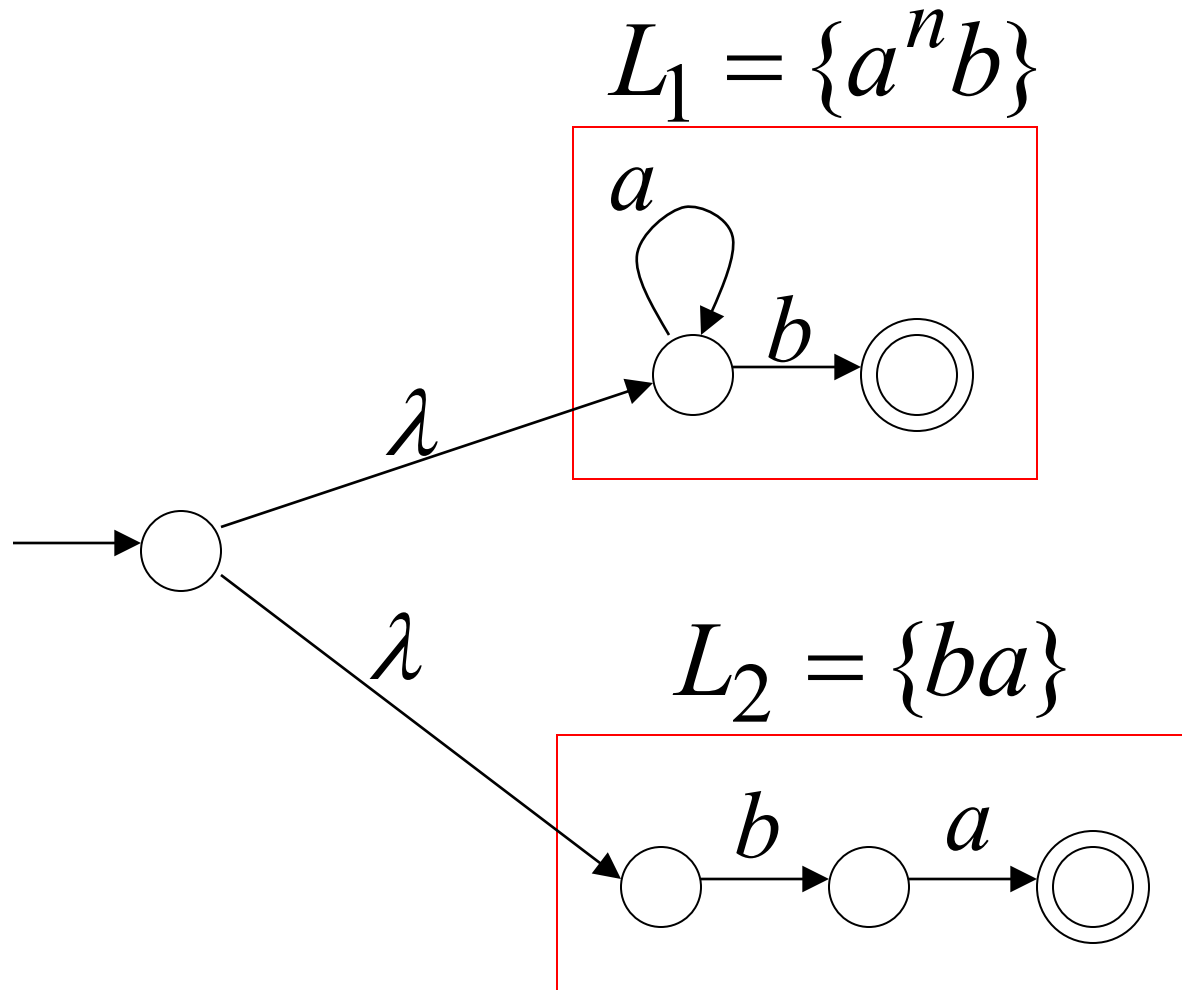
- NFA per



Esempio

NFA per $L_1 \cup L_2 = \{a^n b\} \cup \{ba\}$

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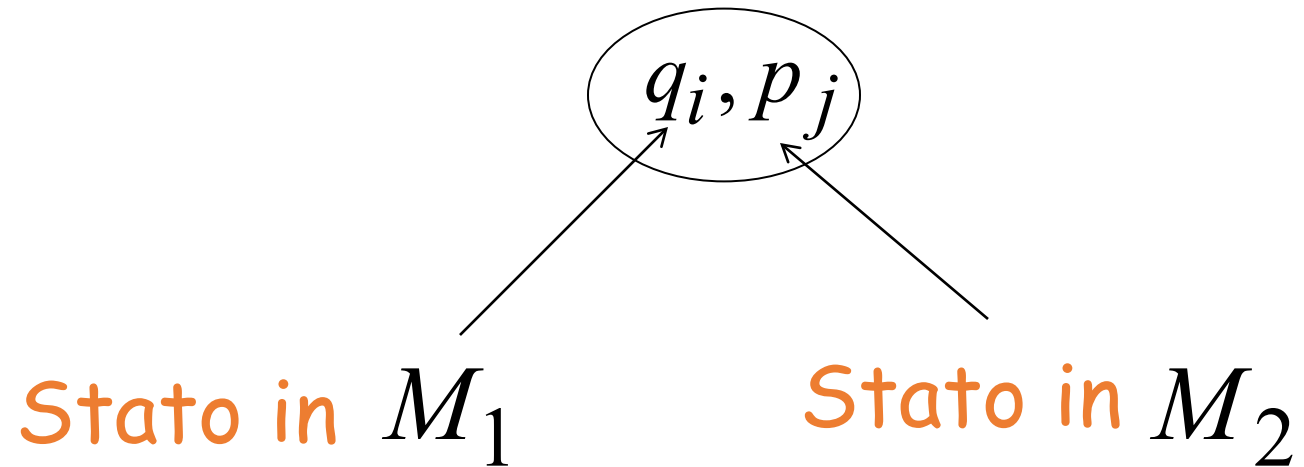
Potremmo definire l'unione in un altro modo.

dati due automi «completi»

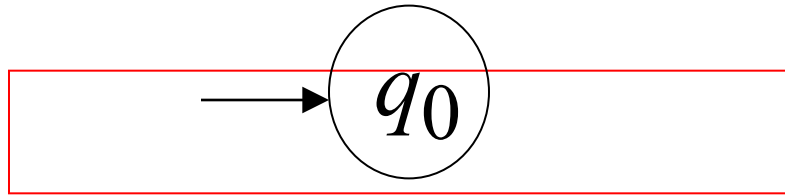
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 M_1 M_2

Stati in M

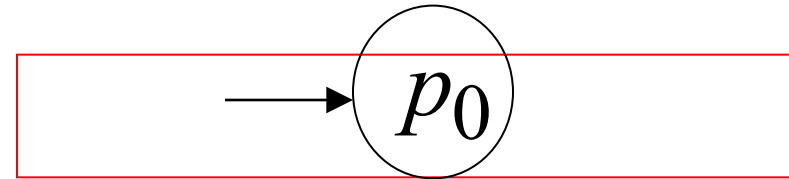


DFA M_1



stato iniziale

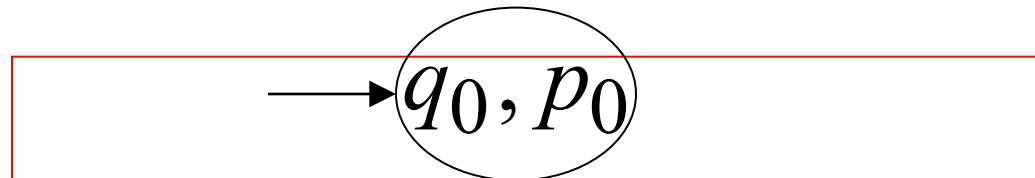
DFA M_2



stato iniziale

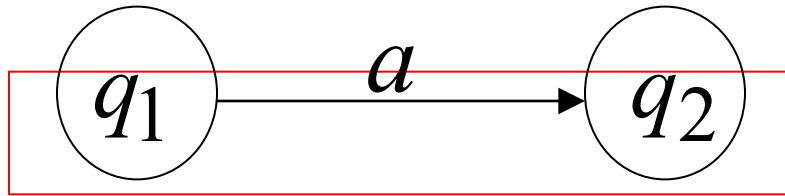


DFA M



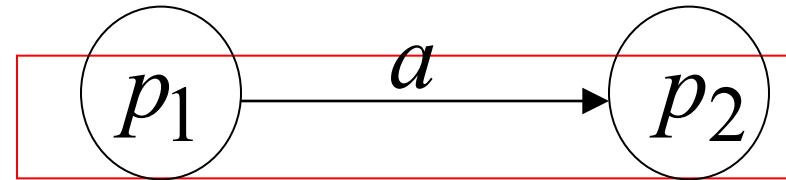
nuovo stato iniziale

DFA M_1



transizione

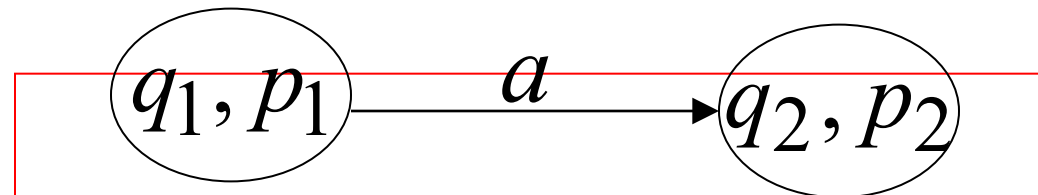
DFA M_2



transizione

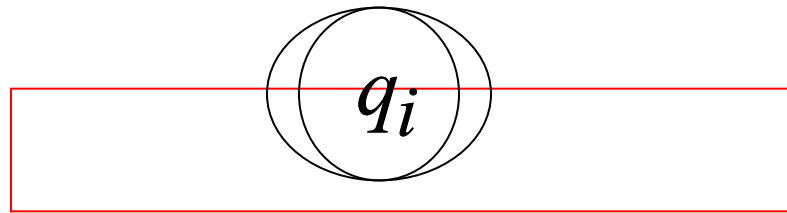


DFA M



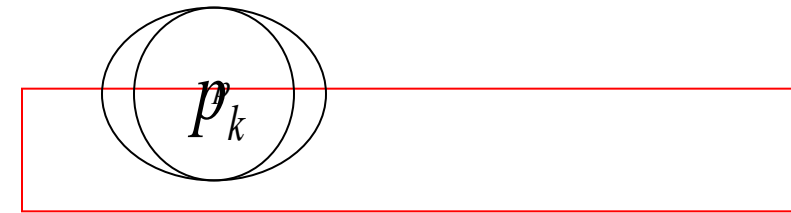
Nuova transizione

DFA M_1

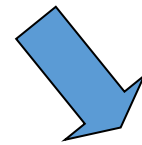


accettazione stato

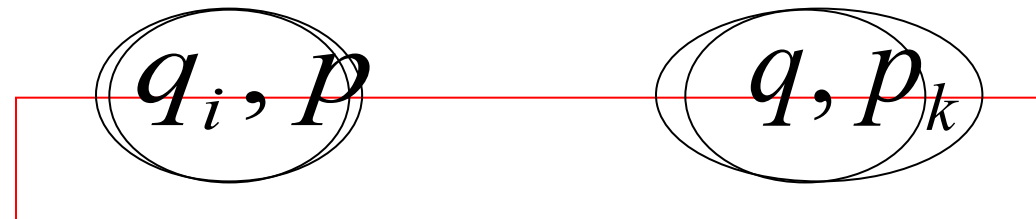
DFA M_2



accettazione stato



DFA M



nuovi stati di accettazione

Con p uno stato
qualsiasi di M_2

Con q uno stato
qualsiasi di M_1

Provare che la definizione
precedente definisce l'unione di
due automi.
Parliamo come.