Exercício 16

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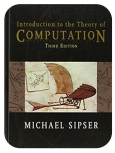

Introduction to the Theory of Computation

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Solução

Certificado

Passo 1

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Part a.

In this case there are no ε-arrows, so we follow the first part of the proof of **Theorem 1.39**. There will be $2^2 = 4$ states in the new machine, one for each subset of set $Q = \{q_1, q_2\}$. Initial state is $\{q_1\}$, and set of accepting state is $\{\{q_1\}, \{q_1, q_2\}\}$. We compute the transition function by collecting all states which can be reached from given subset of states. DFA is given below.

Passo 2

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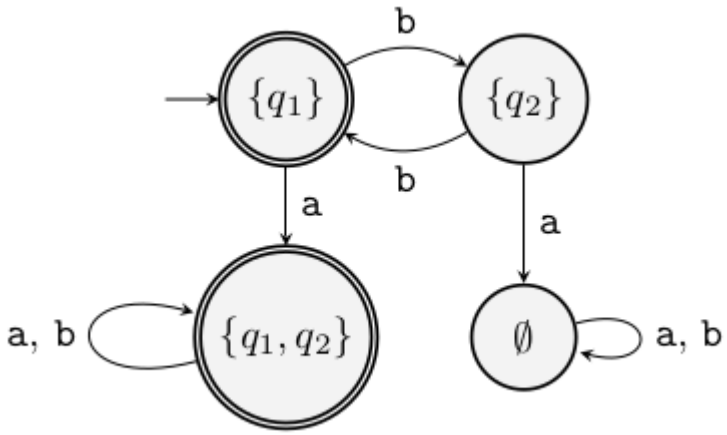

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Part b.

Here we follow the same construction as previously, but at the end add ε-transitions. So the initial state is not $\{q_1\}$, but $\{q_1, q_2\}$. (We write q with multiple indexes for subset of states).

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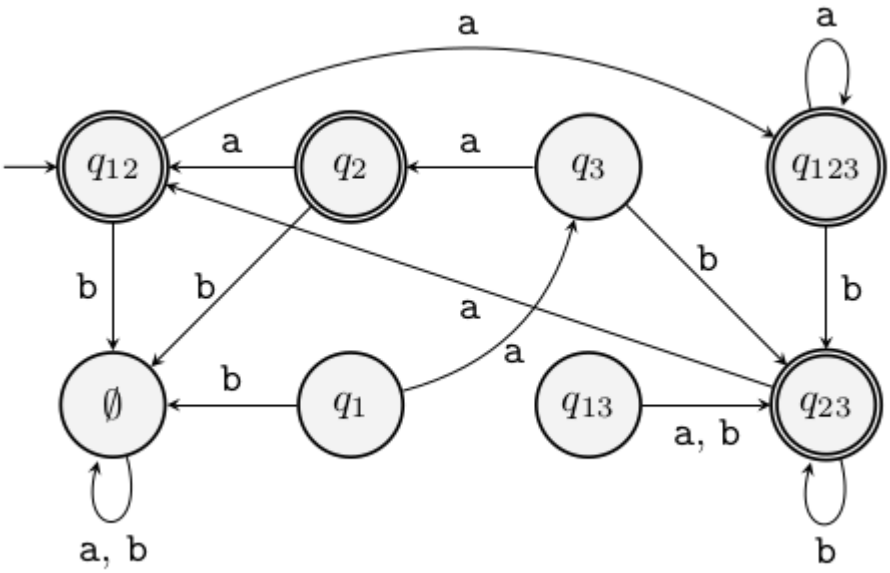

Resultado 5 de 5

We follow the construction in proof of **Theorem 1.39** closely.

‹ Exercício 15

Avaliar esta solução ☆ ☆ ☆ ☆ ☆

Exercício 17 ›