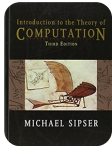


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Exercício 13

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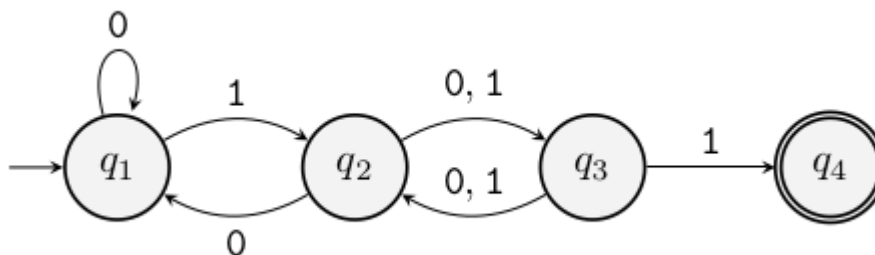
Passo 1

1 de 5

Here is the NFA from hint:

Passo 2

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Passo 3

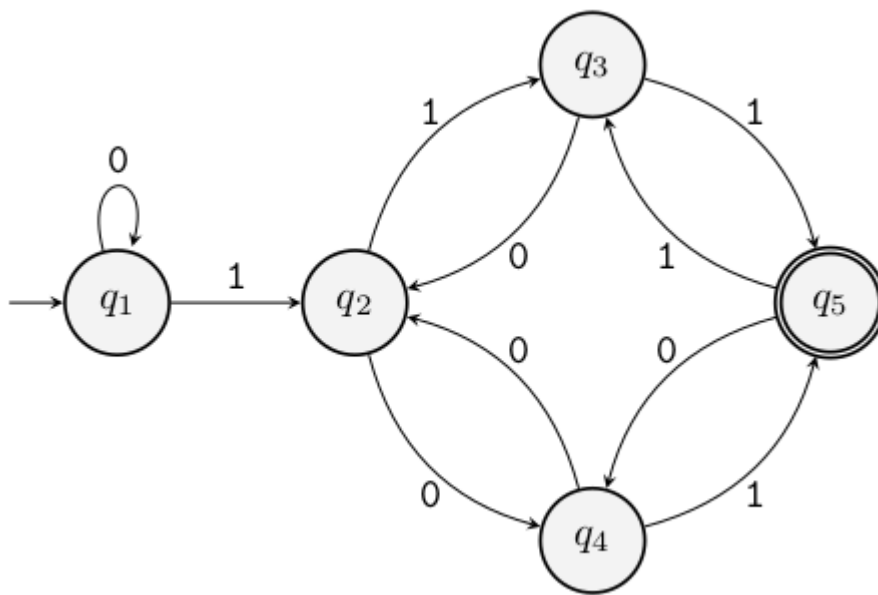
3 de 5

It is important to note that pair of 1's which are separated by odd number of symbols are on positions in string which are of the **same parity**. This is exactly what the NFA does: after having read a 1, it waits for the other 1 to appear in the position of the same parity. Of course, if 1 appears on the position of opposite parity, it accepts any further 1.

With this motivation in mind, we construct the analogous DFA. It must split after first 1, because there are two cases of parity, which it can not handle simultaneously as NFA does.

Passo 4

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**Resultado**

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We get the idea by constructing NFA from hint.

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