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CS332

16 Sept 2015

DFAs and REs

1. DFA

Q = {q0, q1, q2, q3, q4, q5, q6, q7, q8, q9, bh}

Σ = {0, 1}

q0 = q0

F = {q9}

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| δ | q0 | end=1  r0=0  r1=0  q1 | end=1  r0=0  r1=1  q2 | end=1  r0=1  r1=0  q3 | end=1  r0=1  r1=1  q4 | end=0  r0=0  r1=0  q5 | end=0  r0=0  r1=1  q6 | end=0  r0=0  r1=1  q7 | end=0  r0=1  r1=1  q8 | end=11  r0=0  r1=0  q9 | bh |
| **0** | bh | q5 | q8 | q5 | q6 | q7 | q8 | q5 | q6 | q7 | bh |
| **1** | q2 | q4 | q9 | q4 | q3 | q2 | q4 | q4 | q3 | q2 | bh |

1. RE
   1. Floating point

[\-\+]?[0-9]\*\.[0-9eE]+

* 1. Date

(\d{4})-(0[1-9]|1[0-2])-(0[1-9]|[1-2][0-9]|3[0-1])