

# TALF Practica 2

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## 1 Ejercicios

1. Consider the language over the alphabet  $a, b$  that only contains the string  $a$ . a. Build a DFA that recognizes this language and rejects all those strings that do not belong to the language. b. Test the automaton that you have created by introducing 6 chains.

Let  $M = (\{q_0, q_1, q_2\}, \{a, b\}, \delta, q_0, \{q_1\})$  be a DFA with:

$\delta(q, \sigma)$	$a$	$b$
$q_0$	$q_1$	$q_2$
$q_1$	$q_2$	$q_2$
$q_2$	$q_2$	$q_2$

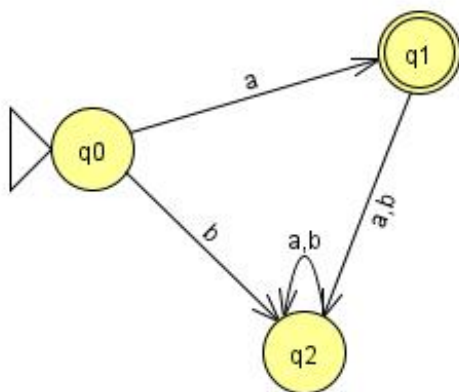


Figure 1: Diagrama del DFA

El archivo JSON sería:  
The automaton will be DFA:

```
{
  "K" : ["q0", "q1", "q2"],
  "A" : ["a", "b"],
  "s" : "q0",
  "F" : ["q1"],
  "t" : [
    ["q0", "a", "q1"],
    ["q0", "b", "q2"],
    ["q1", "a", "q2"],
    ["q1", "b", "q2"],
    ["q2", "a", "q2"],
    ["q2", "b", "q2"]
  ]
}
```