RACSO <u>DFA</u> <u>CFG</u> Operations: <u>Reg</u>, <u>CF</u> <u>PDA</u> Reductions: <u>K</u>, <u>WP</u>, <u>CFG</u>, <u>NP</u>, <u>SAT</u> ANTLR: <u>lex</u>, <u>syn</u> <u>Exams</u>   nil.casas.duatis

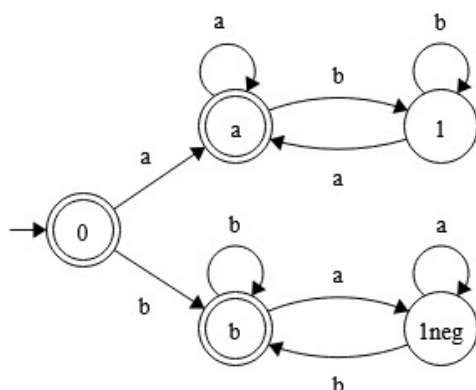# Exercise ‹30›: Minimum DFA for $\{w \in \{a,b\}^* \mid |w|_{ab} = |w|_{ba}\}$

Describe the minimum DFA that recognizes the words over $\{a,b\}$ which have the same number of occurrences of ab as occurrences of ba.

Authors: Guillem Godoy / *Documentation:*

Date: 2025-02-26 16:08:48
Verdict: accepted

Correct automaton.

Fullscreen

Switch to text editor

Usage:

- **Add a state:** double-click on background.
- **Add a transition:** shift-drag from a state to a state.
- **Make a starting state:** shift-drag from background to a state.
- **Make an accepting state:** double-click on a state.

Automaton encoded in text:

```
      a     b
0     a     b     +
1     a     1
1neg 1neg  b
a     a     1     +
b    1neg  b     +
```

Submit   <u>Previous submissions</u>