

**RACSO**[syn](#) [Exams](#)DFA [CFG](#) Operations: [Reg](#), [CF](#) [PDA](#) Reductions: [K](#), [WP](#), [CFG](#), [NP](#), [SAT](#) ANTLR: [lex](#),

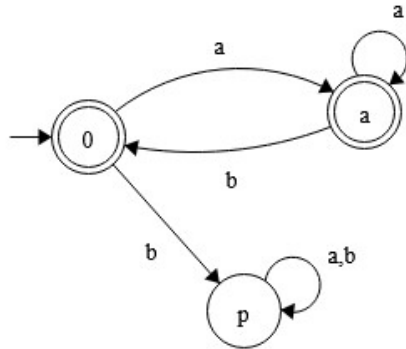
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**Exercise 31:** Minimum DFA for  $\{w \in \{a, b\}^* \mid |w|_{ab} = |w|_b\}$ 

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

*Authors:* Guillem Godoy / *Documentation:***Date:** 2025-02-26 16:17:07**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 p +
a a 0 +
p p p

```

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