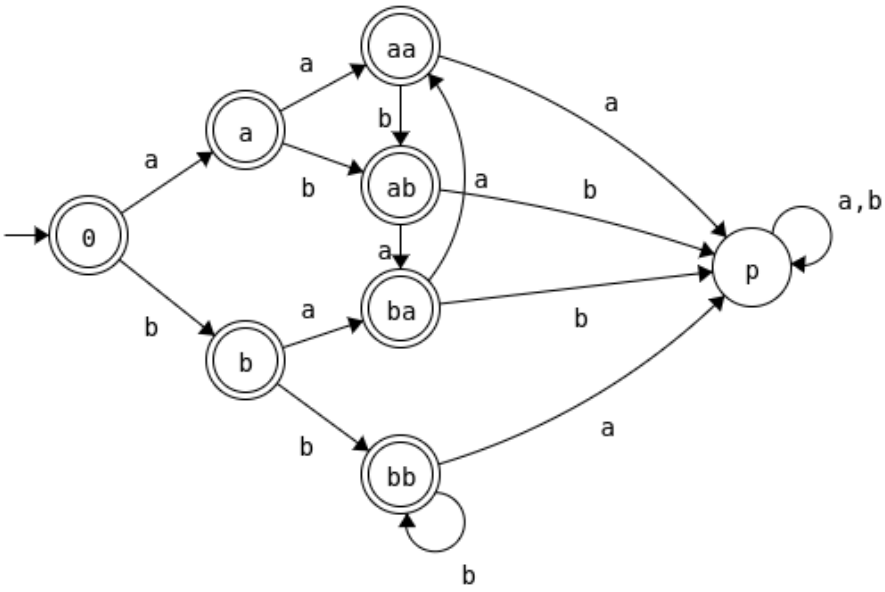
Exercise 12: Minimum DFA for $\{w \in \{a,b\}^* \mid \forall x,y,z : ((w = xyz \wedge |y| = 3) \Rightarrow (|y|_a \in \dot{2} \vee |y|_b \notin \dot{2}))\}$

Describe the minimum DFA that recognizes the language of the words over $\{a,b\}$ whose subwords of length 3 have an even number of a's or an odd number of b's.

Authors: Guillem Godoy / *Documentation:*

Date: 2025-02-19 16:41:31
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  +
 a  aa ab +
 aa p  ab +
 ab ba p  +
 b  ba bb +
 ba aa p  +
 bb p  bb +
 p  p  p
```

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