

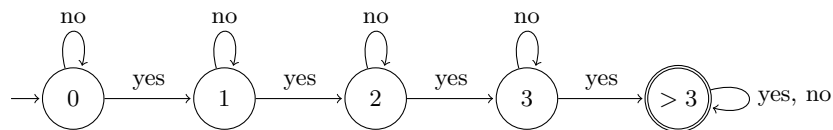
2 Vending Machine Revisited

If \$0.30 or \$0.40 have been inserted (states “30” and “40”), it is not possible anymore to reach state “45” by inserting dimes or quarters; thus, once in these “bad” states, no soda will ever be dispensed again.

One can think of several ways to circumvent this problem. For example, an additional button could be introduced at the machine which allows the user to return to state “0”, ejecting the coins accumulated so far. Another solution would be to allow 5 cent coins.

3 “Mais im Bundeshuus”

- a) The automaton accepts if and only if at least four members of the Swiss Federal Council vote in favor of the proposition. The following machine remembers the number of approving votes.



- b) We consider the alphabet {yes, no, ?}, where “?” denotes abstention of voting.

