boolean secretDoorUnlocked

Description

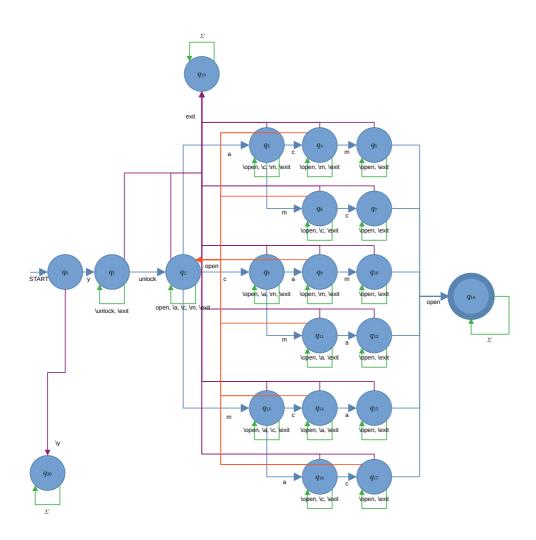
Automaton

$$D=(Q,\Sigma,\delta,q_0,F)$$

 $a{=}w{\vee}up{\vee}s{\vee}down{\vee}a{\vee}left{\vee}d{\vee}right\\ For y, unlock, a, c, m, open, exit: ignore case$

 $L(D) = \{y, \text{ unlock, } \{\text{mandatory a, c, m and optional y, unlock in any order with optional repetition}\}, \text{ open}\} \\ Q = \{q_0, q_1, q_2, q_3, q_4, q_5, q_6, q_7, q_8, q_9, q_{10}, q_{11}, q_{12}, q_{13}, q_{14}, q_{15}, q_{16}, q_{17}, q_{18}, q_{19}, q_{20}\}$

 $\begin{array}{l} \Sigma {=} \{y, unlock, a, c, m, open, exit\} \\ \delta {:} Transition Function \\ F {=} \{q_{18}\} \end{array}$



Table

State	у	unlock	a	С	m	open	exit
$\overline{^{ ightarrow} q_0}$	q_1	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}
q_1	q_1	q_2	q_1	q_1	q_1	q_1	q_{19}
q_2	q_2	q_2	q_3	q_8	q_{13}	q_2	q_{19}
q_3	q_3	q_3	q_3	q_4	q_6	q_2	q_{19}
q_4	q_4	q_4	q_4	q_4	q_5	q_2	q_{19}
q_5	q_5	q_5	q_5	q_5	q_5	q_{18}	q_{19}
q_6	q_6	q_6	q_6	q_7	q_6	q_2	q_{19}
$\overline{q_7}$	q_7	q_7	q_7	q_7	q_7	q_{18}	q_{19}
$\overline{q_8}$	q_8	q_8	q_9	q_8	q_{11}	q_2	q_{19}
q_9	q_9	q_9	q_9	q_9	q_{10}	q_2	q_{19}
q_{10}	q_{10}	q_{10}	q_{10}	q_{10}	q_{10}	q_{18}	q_{19}
q_{11}	q_{11}	q_{11}	q_{12}	q_{11}	q_{11}	q_2	q_{19}
q_{12}	q_{12}	q_{12}	q_{12}	q_{12}	q_{12}	q_{18}	q_{19}
q_{13}	q_{13}	q_{13}	q_{16}	q_{14}	q_{13}	q_1	q_{19}
q_{14}	q_{14}	q_{14}	q_{15}	q_{14}	q_{14}	q_2	q_{19}
q_{15}	q_{15}	q_{15}	q_{15}	q_{15}	q_{15}	q_{18}	q_{19}
q_{16}	q_{16}	q_{16}	q_{16}	q_{17}	q_{16}	q_2	q_{19}
$\overline{q_{17}}$	q_{17}	q_{17}	q_{17}	q_{17}	q_{17}	q_{18}	q_{19}
$^*q_{18}$	q_{18}						
q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}
q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}