

# Deterministic Finite Automata

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1. Make a DFA for the language of all binary integers.
2. Make a DFA for the language of all binary numbers with finite representation (only rational numbers that do not need repeating representation).
3. Make a DFA for numbers written in scientific notation.
4. Make a DFA for the language on  $\{a, b\}$  with no two  $b$ 's in a row.
5. Make a DFA for the language on  $\{a, b\}$  with no  $b$  by itself.
6. Make a DFA for the language  $\{\lambda, a, aa, aab, aaba, aabaa, aabaab, \dots\}$