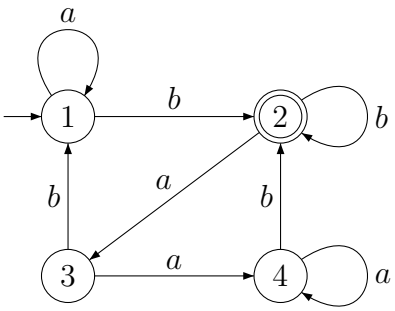
Deterministic Finite Automata

Questions:

Question 1

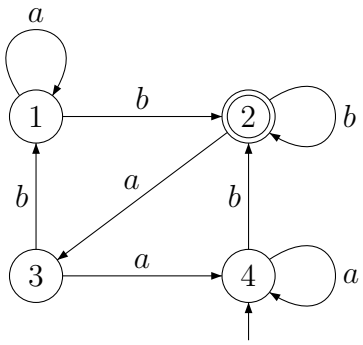
Given the automaton:



enumerate the first ten words in canonical order of the language it accepts.

Question 2

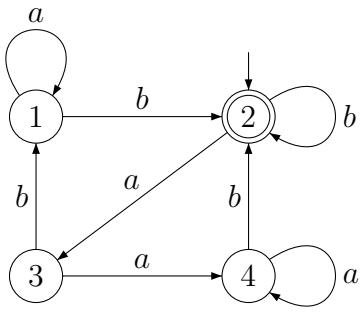
Given the automaton:



enumerate the first ten words in canonical order of the language it accepts.

Question 3

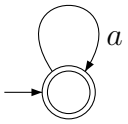
Given the automaton:



enumerate the first ten words in canonical order of the language it accepts.

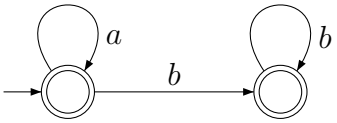
Question 4

Provide a description (the shorter the better) of the language accepted by the following automaton:



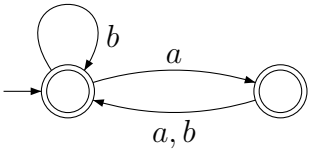
Question 5

Provide a description (the shorter the better) of the language accepted by the following automaton:



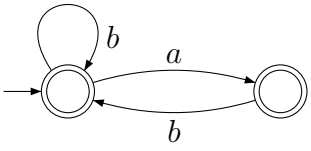
Question 6

Provide a description (the shorter the better) of the language accepted by the following automaton:



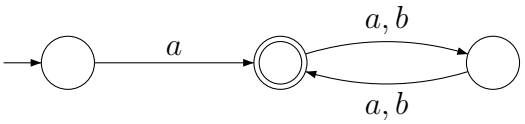
Question 7

Provide a description (the shorter the better) of the language accepted by the following automaton:



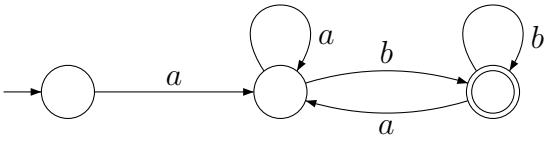
Question 8

Provide a description (the shorter the better) of the language accepted by the following automaton:



Question 9

Provide a description (the shorter the better) of the language accepted by the following automaton:



Question 10

Provide a DFA that accepts the language $\{a\}^* \cup \{b\}^*$

Question 11

Provide a DFA that accepts the language $L = \{x \in \{a,b\}^* \ : \ |x|_a \geq 2\}$

Question 12

Provide a DFA that accepts the language $L = \{x \in \{a,b\}^* \ : \ a \in Pref(a) \wedge ab \notin Seg(x)\}$

Question 13

Provide a DFA that accepts the language $L = \{x \in \{a,b\}^* \ : \ bb \in Seg(x)\}$

Question 14

Provide a DFA that accepts the language $L = \{xbb \ : \ x \in \{a,b\}^*\}$

Question 15

Provide a DFA that accepts the language of words over the alphabet $\{0,1\}$ such that the second and rhe last symbols are 1.