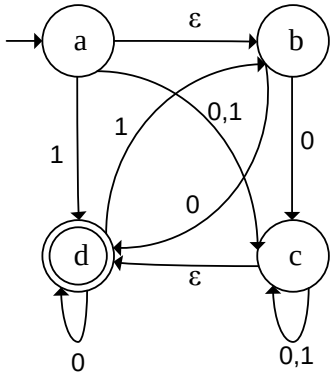
Finite automata. Variant 1.

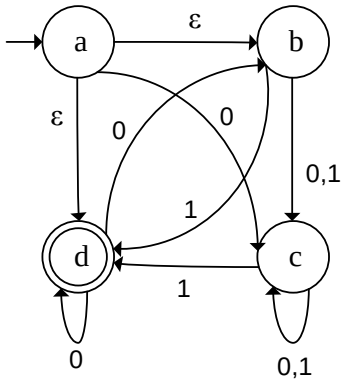
1. Describe the behavior of the NFA if the input string is 0110. Construct a DFA equivalent to the NFA.



2. Construct a regular expression specifying the same language as the language accepted by the DFA from the task 1.
3. Construct a NFA accepting the language specified by the regular expression 0(1+0*)1*.
4. Construct a finite automata accepting numbers in ternary notation divisible by five.

Finite automata. Variant 2.

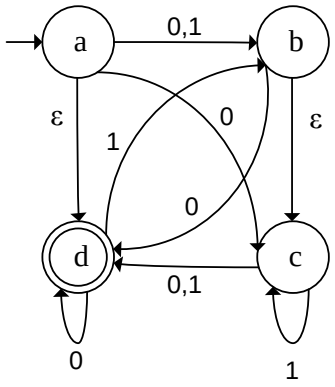
1. Describe the behavior of the NFA if the input string is 0110. Construct a DFA equivalent to the NFA.



2. Construct a regular expression specifying the same language as the language accepted by the DFA from the task 1.
3. Construct a NFA accepting the language specified by the regular expression 0*(1+01+10)1*0.
4. Construct a finite automata accepting numbers in binary notation divisible by five.

Finite automata. Variant 3.

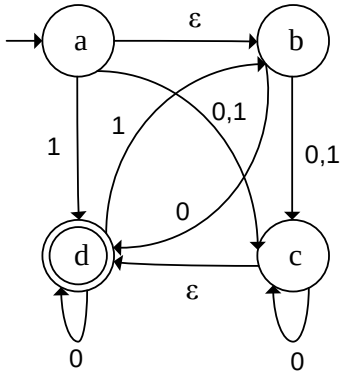
1. Describe the behavior of the NFA if the input string is 0110. Construct a DFA equivalent to the NFA.



2. Construct a regular expression specifying the same language as the language accepted by the DFA from the task 1.
3. Construct a NFA accepting the language specified by the regular expression (1+0*)1*(10+01*).
4. Construct a finite automata accepting numbers in ternary notation divisible by four.

Finite automata. Variant 4.

1. Describe the behavior of the NFA if the input string is 0110. Construct a DFA equivalent to the NFA.



2. Construct a regular expression specifying the same language as the language accepted by the DFA from the task 1.
3. Construct a NFA accepting the language specified by the regular expression 0(1+0*+01)(1+00)*.
4. Construct a finite automata accepting numbers in binary notation divisible by six.