

Assignment 1

Tuesday, 9 April, 2024 23:31

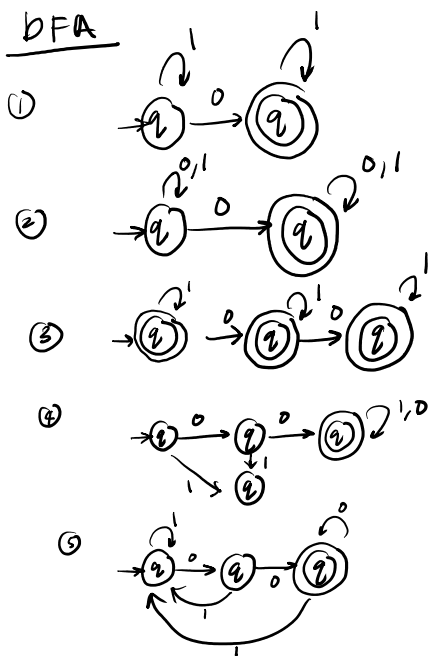


Assignment 1

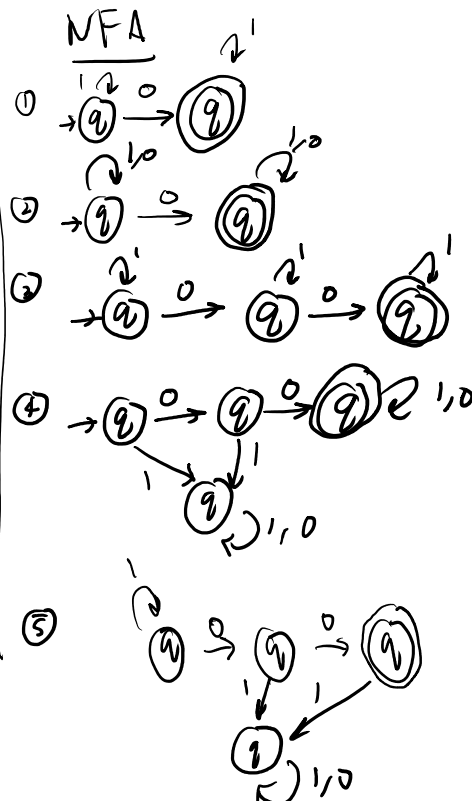
Assignment 1

- For $\Sigma = \{0,1\}$, construct DFAs, NFAs and Regular Expressions for the languages consisting of
 - all strings with **exactly one** 0.
 - all strings with **at least one** 0.
 - all strings with **no more than two** 0's.
 - all strings **starting with** 00.
 - all strings **ending with** 00.

DFA



NFA



Regular Expression

- ① $1^* \cdot 0 \cdot 1^*$
- ② $(1+0)^* \cdot 0 \cdot (1+0)^*$
- ③ $(1)^* \cdot 00 \cdot (1)^*$
- ④ $00 \cdot (1+0)^*$
- ⑤ $(1+0)^* \cdot 00$