

1. (a) $\{w \in \{a,b\}^*: w \text{ does not contain } aa \text{ and ends in } b\}$

(b) DFA quintet $(\mathbb{Q}, \Sigma, \delta, q_0, F) = (\{1,2,3\}, \{a,b\}, [[2,1],[3,1],[3,3]], 1, \{1\})$

(c)

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3 2
a b
2 1
3 1
3 3
1
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