

Quiz 2 from Spring 2021 solutions:

1. $\Sigma = \{a, b\}$

$$Q = \{\{1\}, \{2\}, \{3, 4\}, \{4\}\}$$

$$q_0 = \{1\}$$

$$\delta = \{(\{1\}, a, \{3, 4\}), (\{1\}, b, \{2\}), (\{2\}, b, \{3, 4\}), (\{2\}, a, \{4\})\}$$

$$F = \{\{3, 4\}, \{4\}\}$$

2. $(b+ab^*)^+$

Accepts bbaba, babbaba, bbbab.

3. The third one is correct.

4. For **cc**: $(3, \varepsilon, 5)$

For **ab**: $(4, \varepsilon, 6)$

For **abaaba**: $(6, \varepsilon, 1)$

(there are other correct answers)