

**Advanced Sequence Analysis
Summer 2019**

Exercises

Number 2 (26.04.2019), Discussion: 03.05.2019

1. (a) Draw the trie for the set of words $S = \{\text{ababaa}, \text{bbaba}, \text{ababba}, \text{aa}, \text{abaaaa}, \text{bba}, \text{aabba}\}$.
(b) Draw a DAWG for the same set of words.
2. Draw a deterministic finite automaton that recognizes the set of words on the alphabet $\{a, b\}$ that start with an **a** and do not contain **ba**.
3. Draw a deterministic finite automaton that recognizes the set of words on the alphabet $\{a, b\}$ that contain **aa** and end with **bb**.
4. Describe in your own words an algorithm that removes a word from a trie.