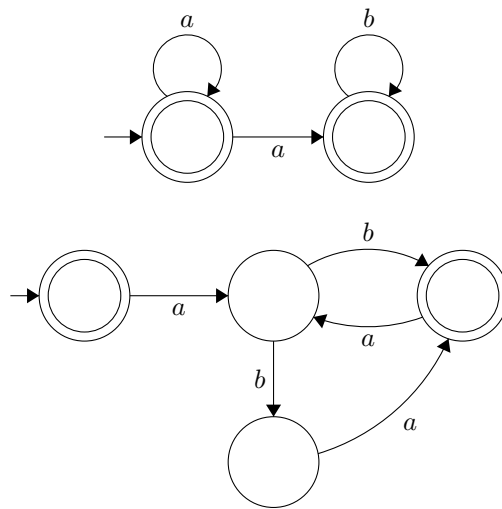# COMP3721 Tutorial 3

1 NFAs and Regular Expressions

1. Draw state diagrams for NFAs that accepts the following languages.

   (a) $(ab)^*(ba)^* \cup aa^*$

   (b) $((ab \cup aab)^*a^*)^*$

2. Write regular expressions for the languages accepted by the following NFA.

3. (a) Find a simple NFA accepting $(ab \cup aab \cup aba)^*$.

   (b) Convert the NFA of (a) to DFA.