

## Homework #1 - RE -> minimized DFA

1. Use the following regular expression and answer the questions.

(All answers need to be described with the steps toward the final answer.)

$(a \mid b)^* abb$

- A) Draw a NFA by using Thompson's construction.
- B) Convert the NFA in (A) to DFA by using subset construction.
- C) Minimize the DFA in (B) by using Hopcroft's algorithm.