1. Use Thompson’s algorithm to create an NFA for the following regular expressions:

(a) \((0 + 1)^*\)
(b) \(01^* + 10^*\)
(c) \((0 + \varepsilon)^*1^*(0 + \varepsilon)^*\)

2. Use the incremental subset construction to build a DFA that accepts the same language as the following NFAs:

(a) ![Diagram](image1)

(b) ![Diagram](image2)

(c) ![Diagram](image3)

Work on this later:

4. Use the incremental subset construction to convert the NFAs from part 1 to DFAs