Reading assignment: Finish reading Chapter 1 of Sipser’s book sections 1.1-1.3.

Problems:

1. Sipser’s book page 88, Problem 1.27
2. Sipser’s book page 84, Exercise 1.5
4. For a language $A$ define the reverse of $A$, $A^R = \{ x^R \mid x \in A \}$. Give a construction that will take a DFA $M$ that recognizes $A$ and convert it to an NFA $M'$ that recognizes $A^R$. Give a formal definition of $M'$ based on $M$ and briefly argue why your construction is correct.
5. Sipser’s book page 88, Problem 1.25
6. (Bonus) Sipser’s book page 89, Problem 1.31