1. Use Thompson’s algorithm to construct NFAs for the following regular expressions. Show the sequence of moves made by each in processing the input string ababbab. (8 points)
   a. (alb)*
   b. (a*|lb*)*
   c. ((ε|a)b*)*
   d. (alb)*abb(alb)

2. Convert the NFAs from problem 1 into DFAs using the subset construction algorithm. (12 points)

3. Minimize the states of the DFAs of problem 2 using the partition algorithm. (12 points)