Quiz 09 - DFA & NFA Equivalence

Instructions:

- **Your submissions must be submitted in the Quiz09 directory of your Quizzes directory in your GitHub repository.**
- **Cheating of any kind is prohibited and will not be tolerated.**
- **Violating and/or failing to follow any of the rules will result in an automatic zero (0) for the lab.**

TO ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTOOD THE INSTRUCTIONS ABOVE, AT THE BEGINNING OF YOUR SUBMISSION(S), ADD A COMMENT THAT CONSISTS OF YOUR NAME AND THE DATE

Grading

Question	Maximum Points	Points Earned
1	0.1	
1	0.1	
1	0.1	
1	0.1	
1	0.1	
Total	0.5	

Given that the languages L_1 and L_2 are recognized by the DFA $M(Q_1, \Sigma_1, \delta_1, q_1, F_1)$ and the NFA $N(Q_2, \Sigma_2, \delta_2, q_2, F_2)$, respectively, answer the following questions

Question 1: What does it mean for a DFA and an NFA to be equivalent?

Question 2: In the construction of a DFA equivalent to the NFA N, what is its start set?

Question 3: In the construction of an NFA equivalent to the DFA M, what does its transition function evaluate to for an ε input?

Question 4: In the construction of a DFA equivalent to the NFA N, what is the maximum number of states in its set of states?

Question 5: In the construction of an NFA equivalent to the DFA M, what does its transition function evaluate to for non-ε inputs?