Practice Sheet - DFA

- 1. Draw a DFA for the set of binary strings that start with **01**. $\Sigma = \{0,1\}$
- 2. Draw a DFA for the set of binary strings that are divisible by 8 while considered as binary numbers. $\Sigma = \{0,1\}$
- 3. Draw a DFA for the set of strings that end with **abb**. $\Sigma = \{a, b, c\}$
- 4. Draw a DFA for the set of binary strings that have an even number of $\mathbf{0}$'s or an odd number of $\mathbf{1}$'s. $\Sigma = \{0,1\}$
- 5. Draw a DFA for the set of strings that have **011** as a substring and **001** as not a substring. $\Sigma = \{0,1\}$
- 6. Draw a DFA for the set of strings that have a length of at least 4. $\Sigma = \{a, b\}$
- 7. Draw a DFA for the set of binary strings that contain at least three 1's. $\Sigma = \{0,1\}$
- 8. Draw a DFA for the set of strings that have exactly three **a**'s. $\Sigma = \{a, b, c\}$
- 9. Draw a DFA for the set of strings that have lengths of not more than **6**. $\Sigma = \{0,1\}$
- 10. Draw a DFA for the set of strings that have exactly three 1's and four 0's. $\Sigma = \{0,1,2\}$
- 11. Draw a DFA for the set of strings that have **three** consecutive 1's. $\Sigma = \{0,1\}$