Formal Languages & Automata Theory - January 2019

DFA Practice

Design a DFA for each of the languages below. For each language, $\Sigma = \{0, 1\}$.

1. { w | w has at least two 1's }
2. { w | w contains a substring *101*}
3. { w | w has an odd number of 1's }
4. { w | was has an even length }
5. { w | w starts with an 0 }
6. { w | w starts with an 0 and has at most two 1's}
7. { w | w has an odd number of 1's and one or two 0's}
8. { w | w has at least two 1's and at least three 0's}
9. { w | w has even length and an even number of 1's}