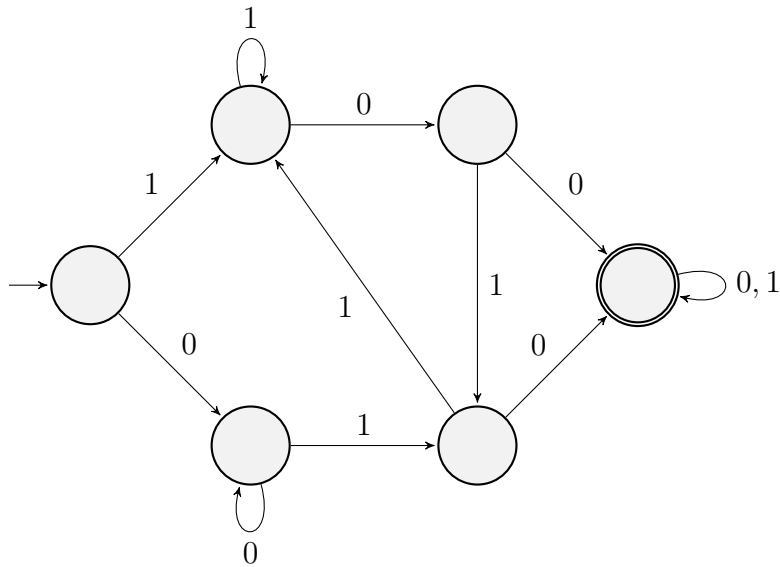# Assignment 1

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Problem 0.1. Give a DFA for the language of all strings over the alphabet $\{0, 1\}$ which contain an occurrence of 010 or $100C$ as a contiguous substring.

Solution.

Problem 0.2.

Solution.

```
           → ( 000 )
          A  /        \  B
            /          \
     ( 100C )          ( 011C )
        |    \      B /    |
      A |      \    /      | A
        |    B  \  /       |
        |       / \        |
        ↓      /   \       ↓
     ( 001 ) ──────A────→ ( 101 )
```