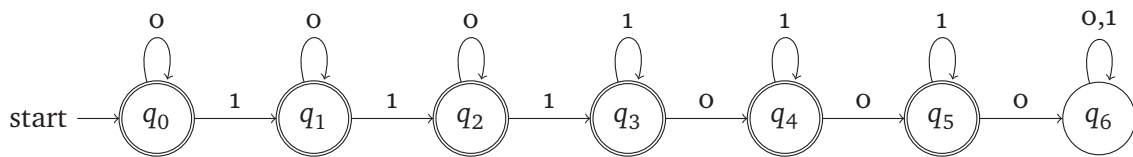## Problem type 1:

Provide the regular expression that describes the following NFA/DFA:
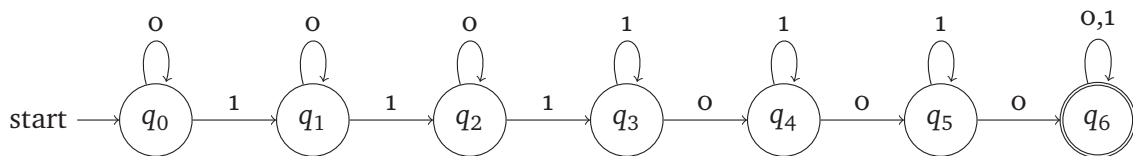
> *(See variants below)*

There is not enough time to go through Thompson's algorithm and such. You should simply attempt to look at the language that the DFA/NFA represents and write the regular expression for that.
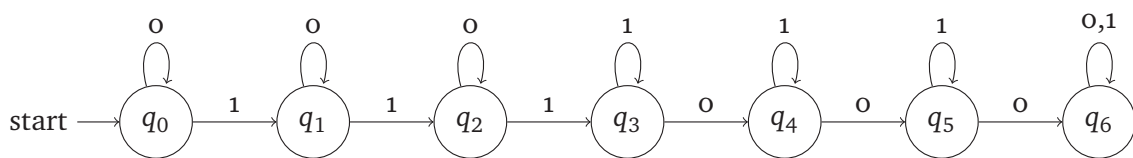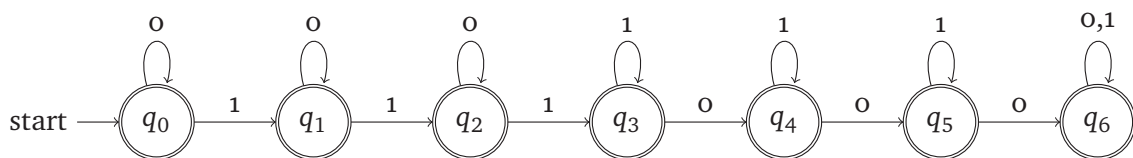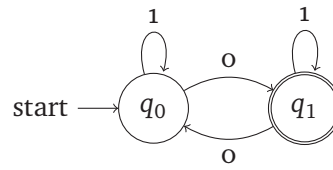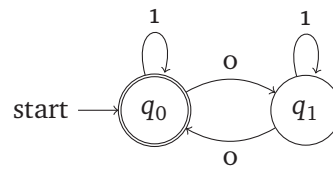
a. **BYE**

b. **BYH**

c. **BYC**

d. **BYG**

e. **BYB**

```
        1              1
       ↺              ↺
              O  →
start → (q0) ⇄ ((q1))
              O
```

f. **BYF**

```
        1              1
       ↺              ↺
              O  →
start → ((q0)) ⇄ (q1)
              O
```

g. **BYA**

```
     O,1                        O,1
      ↺                          ↺
            1         O         1
start → (q0) → (q1) → (q2) → ((q3))
                    ε
```

h. **BYD**

```
start → (q0) →1→ (q1) →1→ (q2) →1→ (q3) →O→ (q4) →O→ (q5) →O→ ((q6))
```