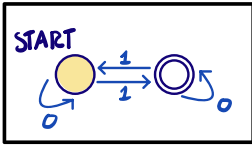
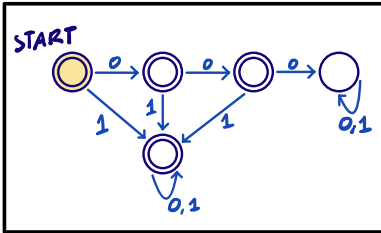


* START nodes are colored in yellow

5.1)



5.2)

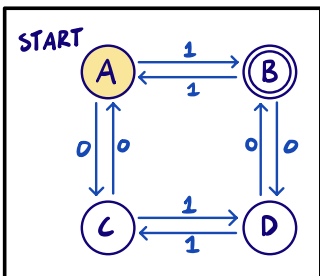


5.3)

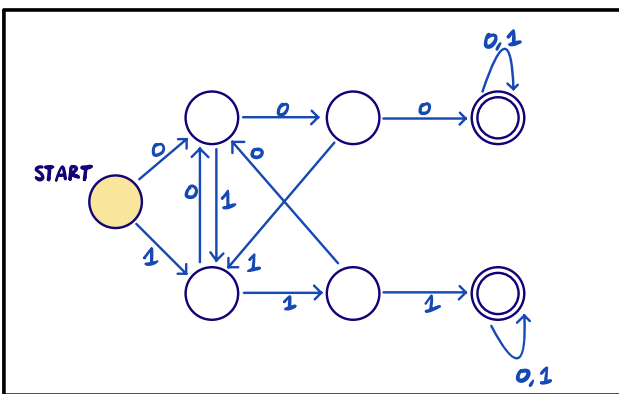
To make this easier, we can define four states as follows, where ● = Accept and ● = Reject.

- A: even # of 0's and 1's
- B: even # of 0's and odd # of 1's
- C: odd # of 0's and even # of 1's
- D: odd # of 0's and 1's

The empty string has an even # of 0's and 1's, so we will start at A.



5.4)



The upper branch handles 000

The lower branch handles 111

5.5)

