CSC-257
Theory Of Computation
(BSc CSIT, TU)

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Conversion of Finite Automata to Regular Grammar(RLG)

- **Rule 1 :** if FA has 

then production will be A → aB

- **Rule 2 :** if FA has 

then production will be A → aA

- **Rule 3 :** if FA has 

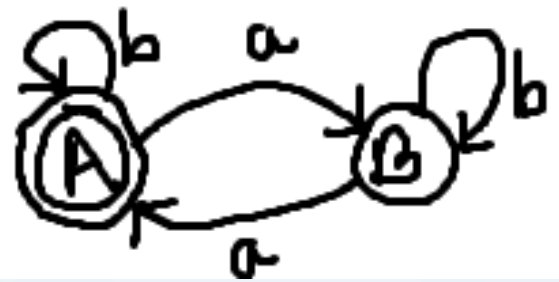
then, production will be A → aB | a

- **Rule 4 :** if start state is final state i.e. 

then, add ε in production of start variable S.

Conversion of Finite Automata to Regular Grammar(RLG)

- **Example :** Convert the following DFA into regular grammar(Right Linear)



- **Solution :**
- Regular Grammar is G = ({A, B}, {a, b, ε}, P, A)
- Where P = {

  A → aB | bA | b | ε

  B → aA | bB | a

- }

Conversion of Finite Automata to Regular Grammar(RLG)

- **Exercise :** Convert the following finite automata into regular grammar(Right Linear)
- 1.

- 2.