

#### **Preet Kanwal**

Department of Computer Science & Engineering



#### Unit 2

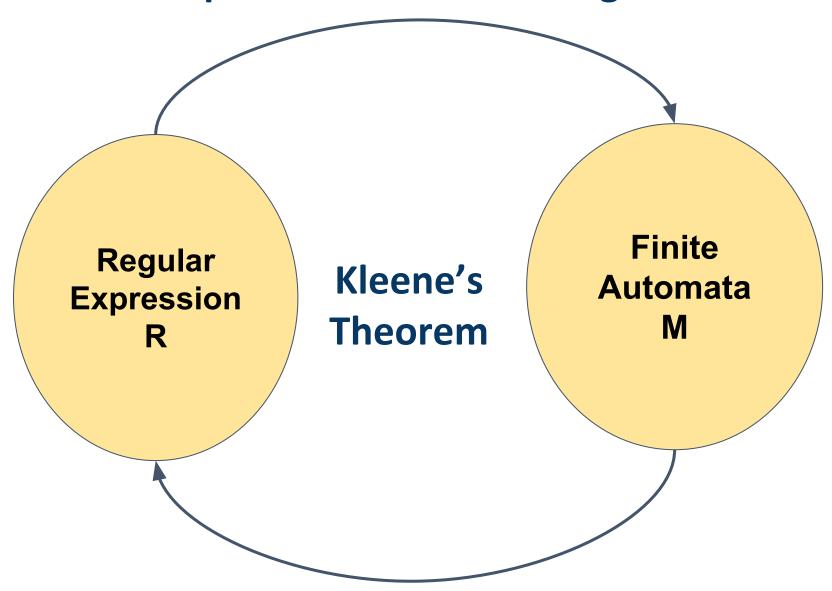
#### **Preet Kanwal**

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#### **Unit 2 - Regular Expression to Finite Automata**



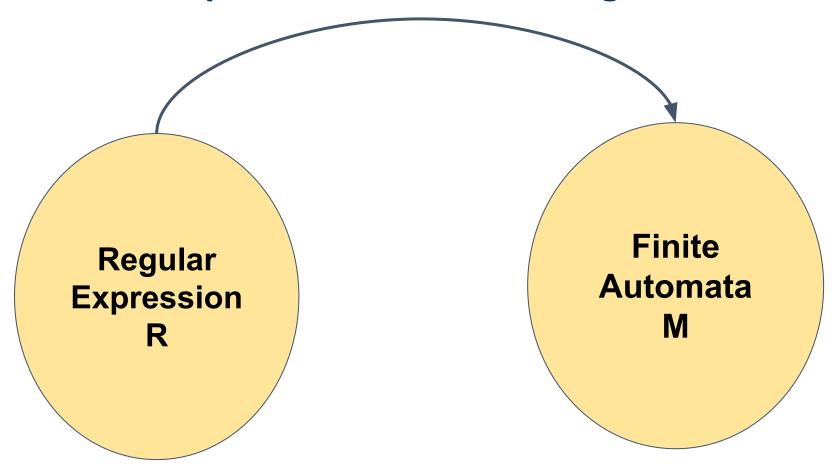
#### **Thompson's Construction Algorithm**



**State Elimination Algorithm** 

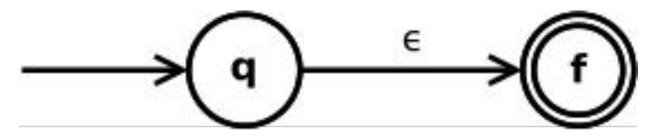
#### **Unit 2 - Regular Expression to Finite Automata**

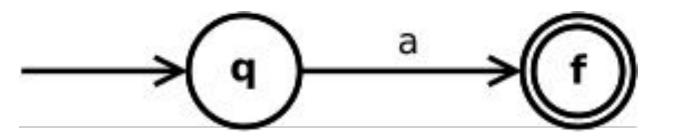
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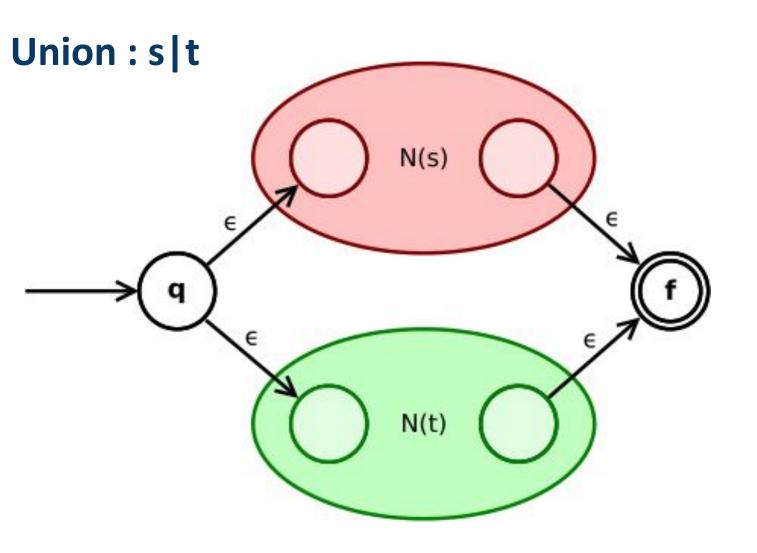
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#### **Unit 2 - Regular Expression to Finite Automata**

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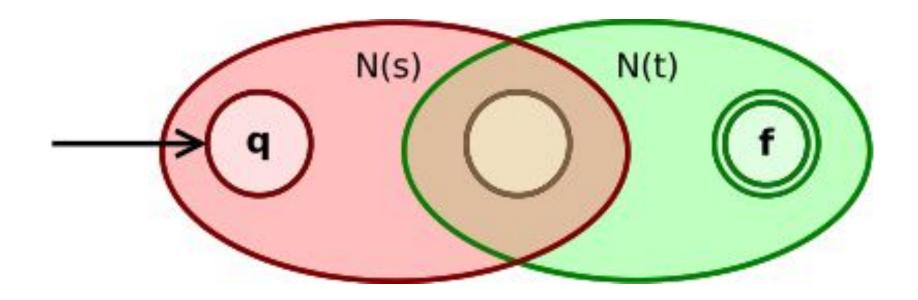


#### **Unit 2 - Regular Expression to Finite Automata**

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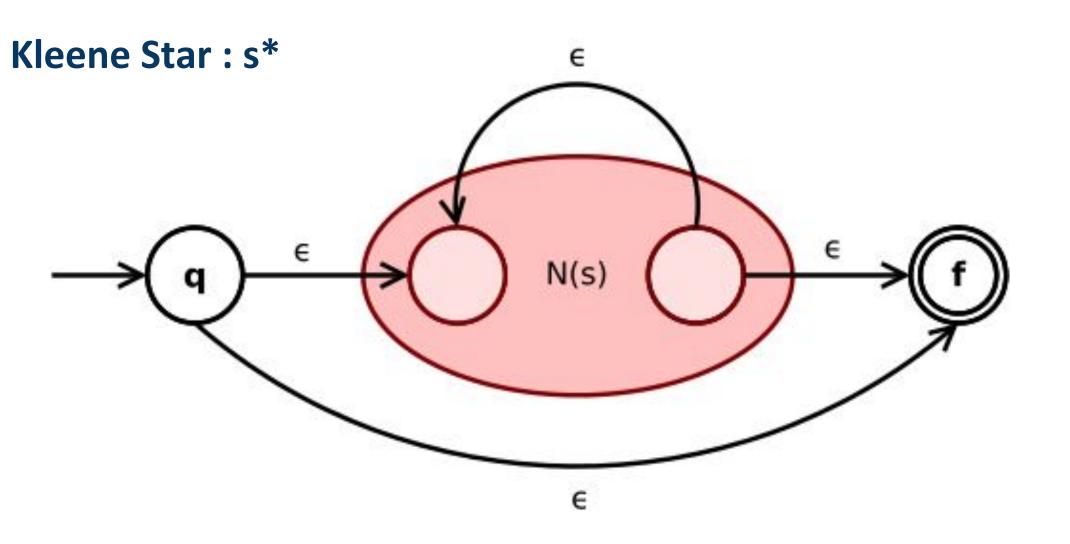
#### **Thompson's Construction Algorithm**

#### **Concatenation: s.t**



#### **Unit 2 - Regular Expression to Finite Automata**

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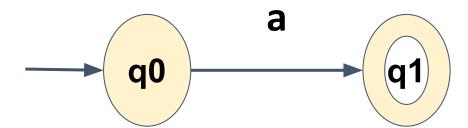


#### **Unit 2 - Regular Expression to Finite Automata**



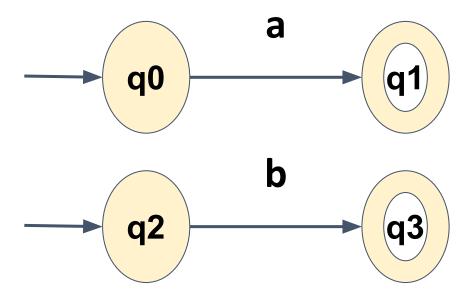
#### **Unit 2 - Regular Expression to Finite Automata**





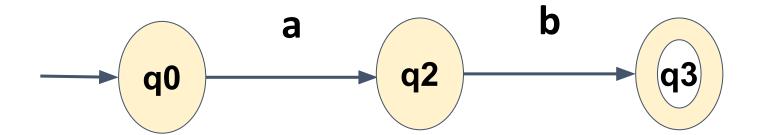
#### **Unit 2 - Regular Expression to Finite Automata**





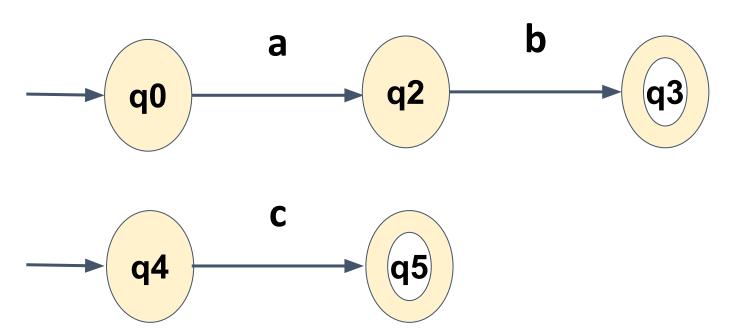
#### **Unit 2 - Regular Expression to Finite Automata**





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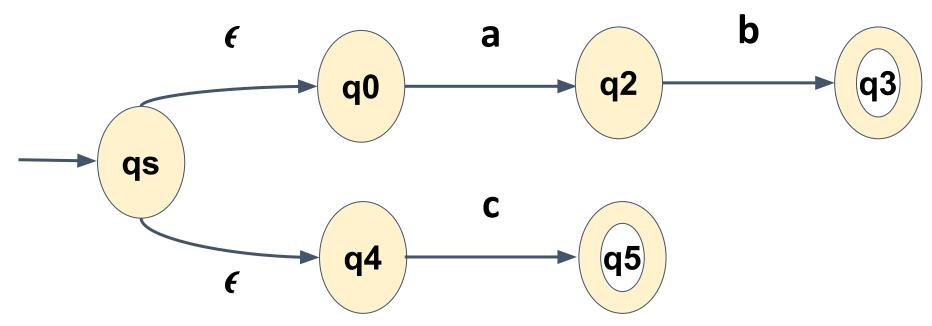




#### **Unit 2 - Regular Expression to Finite Automata**



#### **Construct Finite Automata for the following Regex:**

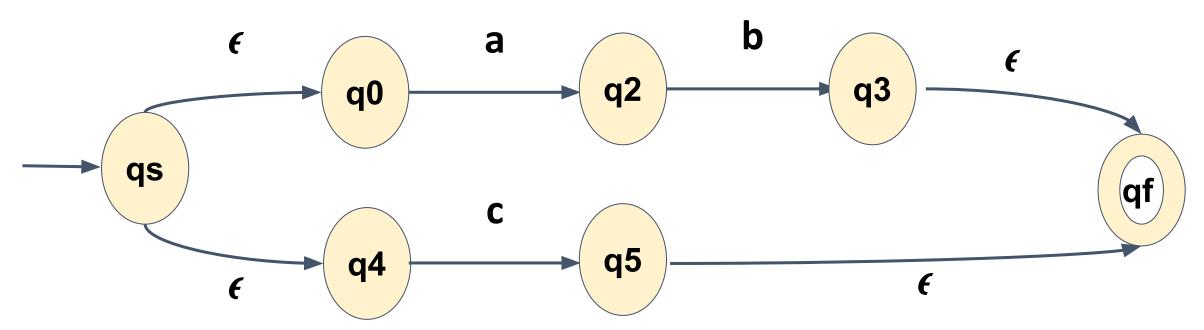


https://www.cs.york.ac.uk/fp/lsa/lectures/REToC.pdf

#### **Unit 2 - Regular Expression to Finite Automata**



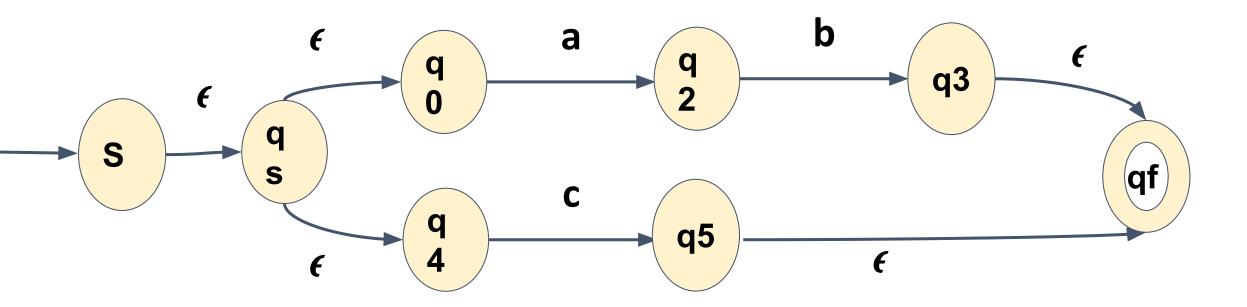
#### **Construct Finite Automata for the following Regex:**



https://www.cs.york.ac.uk/fp/lsa/lectures/REToC.pdf

#### **Unit 2 - Regular Expression to Finite Automata**

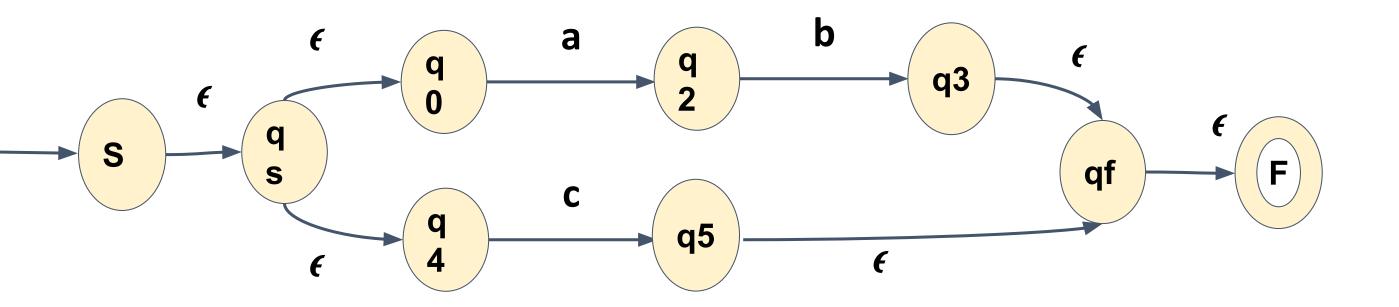




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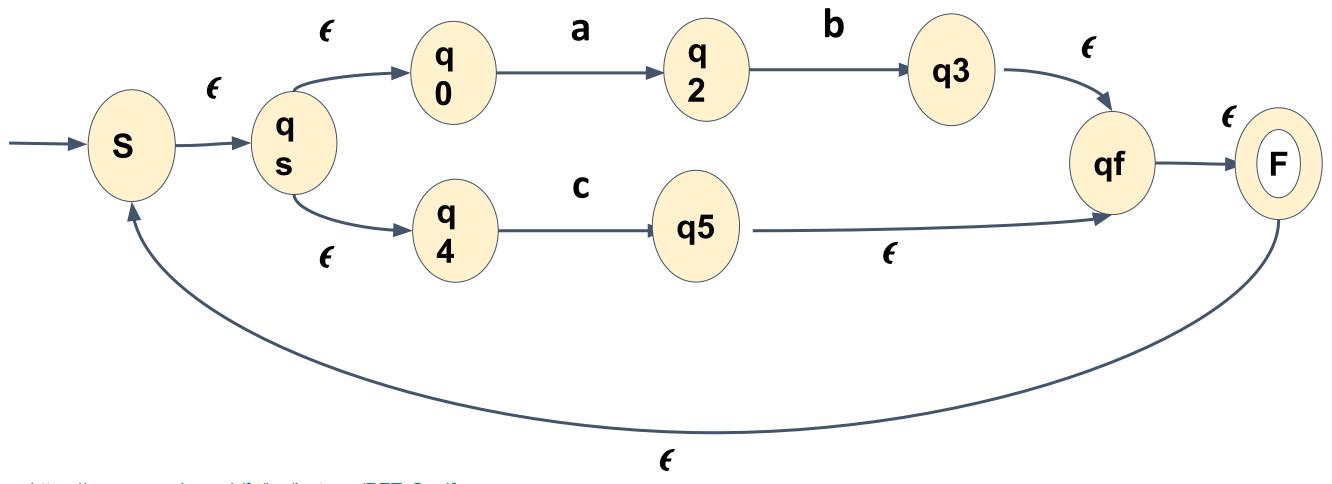
## (ab+c)\*



#### **Unit 2 - Regular Expression to Finite Automata**

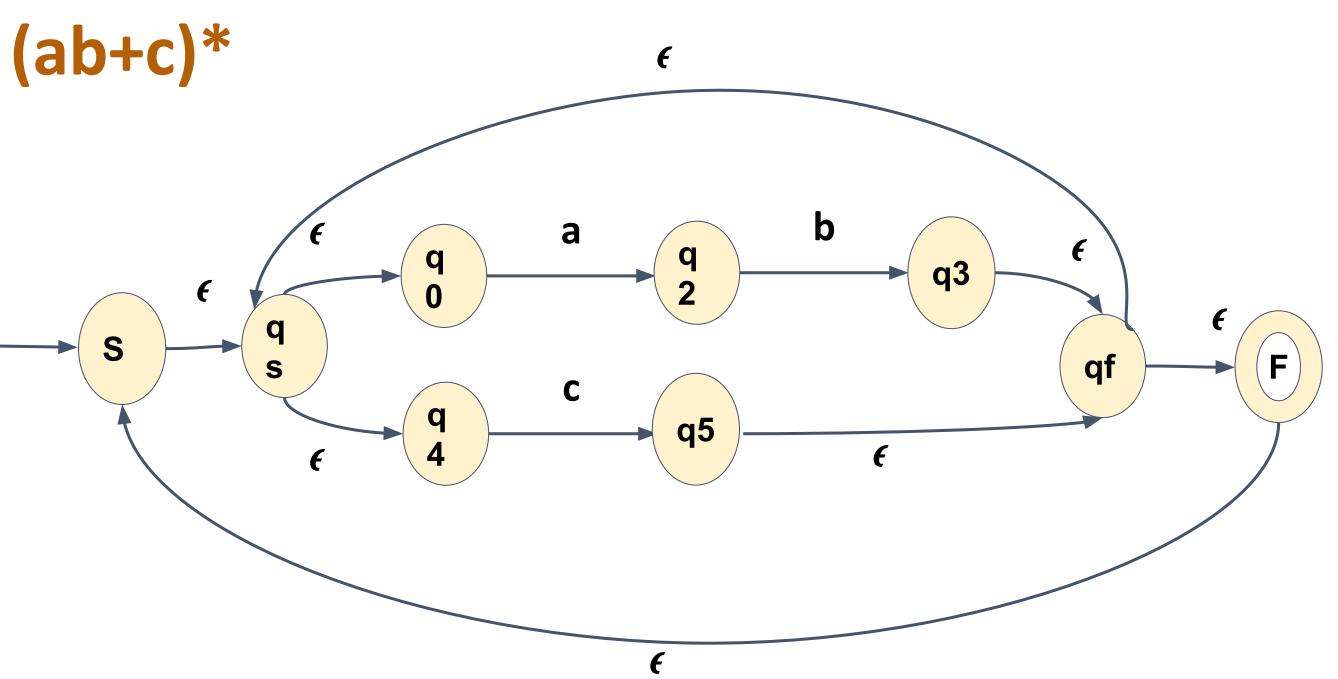


## (ab+c)\*



#### **Unit 2 - Regular Expression to Finite Automata**





# **Automata Formal Languages and Logic Unit 2 - Regular Expression to Finite Automata**



**Construct Finite Automata for given Regex** 



#### **THANK YOU**

#### **Preet Kanwal**

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