

# Applied Data Science and Machine Learning Course

## Course Instructor

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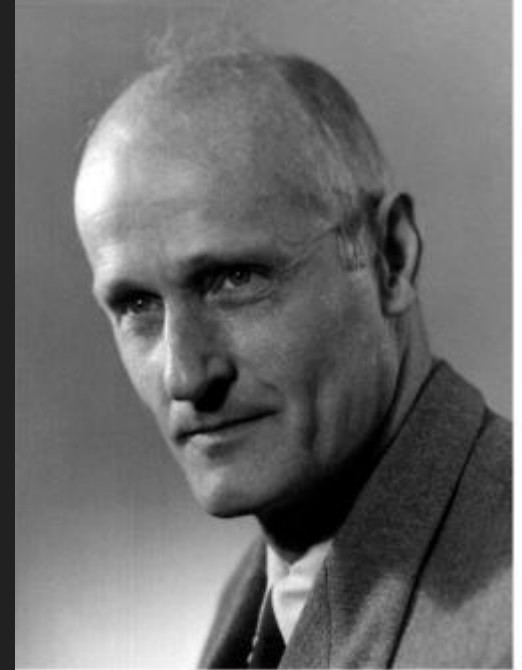


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# Regular Expression

# Stephen Cole Kleene (American Scientist)

Invented Regular Expressions  
in the mid-1950s



*Stephen C. Kleene*

# State Diagram

Pattern to Match:

Find all strings that :

- start with an 'a'
- ends with a 'c'.
- in between there can be any number of 'b's

Example :

- ac
- abc
- abbc
- abbbc
- abb.....bbc

# State Diagram

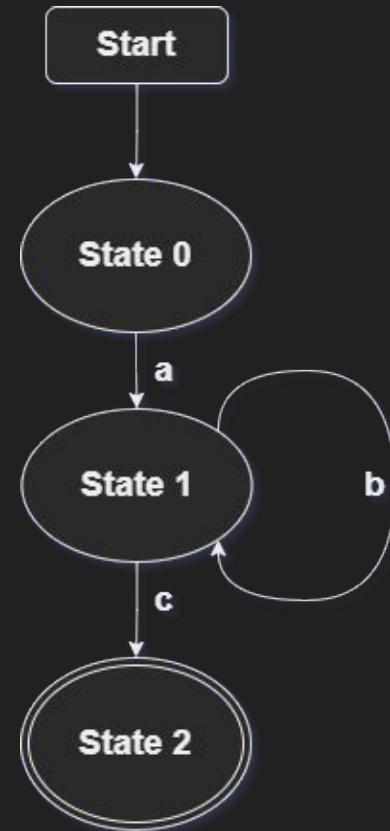
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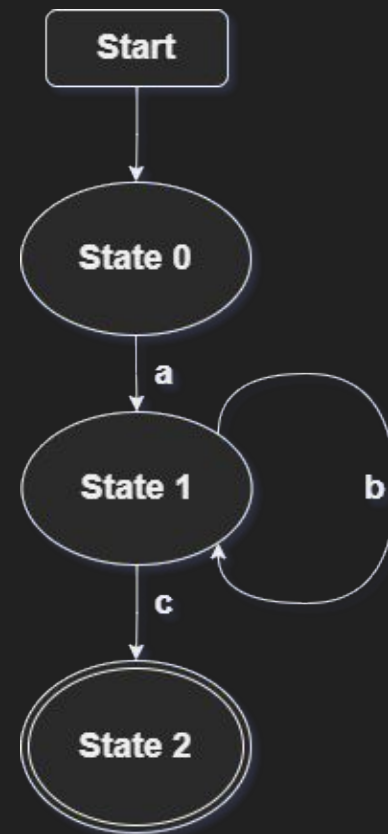
Example :

- ac
- abc
- abbc
- abbbc
- abb.....bbc



Regular Expression:

**ab\*c**



# USES

- Search a string (match a pattern)
  - Break string into substring
  - Replace part of a string