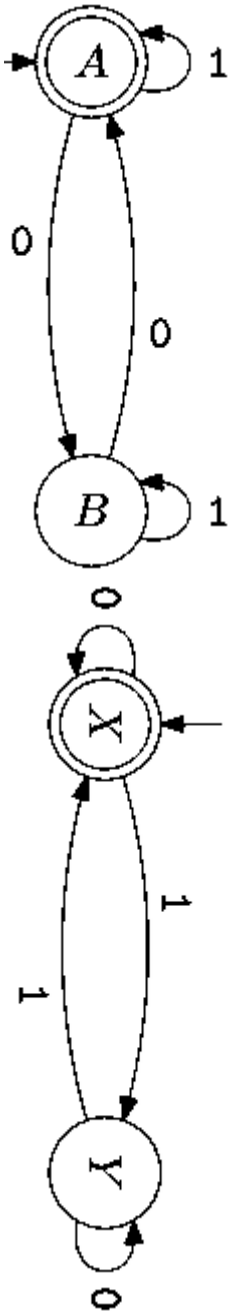
Q. What do you mean by closure properties of regular languages? Define some important Closure properties.
Ans. Closure properties: A set is closed under an operation if applying that operation to any members of the set always yields a member of the set.
Closure under Kleene: The set of regular languages is closed under each Kleene operation. That is, if L1 and L2 are regular languages, then

- L1 ∪ L2 is regular
- L1L2 is regular
- L1∗ is regular.

Closure under Complementation: The set of regular languages is closed under complementation.
The complement of language L, written L'.
Closure under Intersection: The set of regular languages is closed under intersection.
Closure under Intersection: That is, if L1 and L2 are regular languages, then

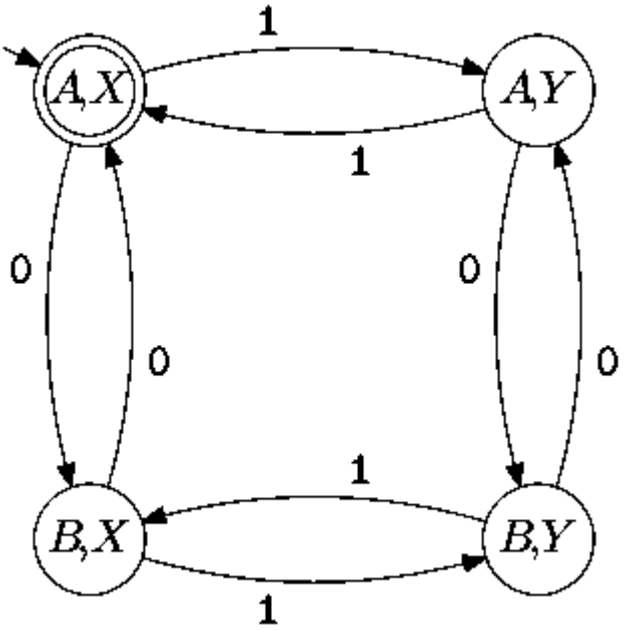
- L1 ∩ L2 is regular

For example: Suppose L1 is the binary strings with an even number of 0's, and L2 the binary strings with an even number of 1's. Then the FAs for these languages both have two states:




And so the FA for L1 ∩ L2 has four states:

Product Construction for Even 0’s and 1’s




Related posts:

1. Relationship among entities
2. Introduction of IOT
3. Marketing Managment RGPV Diploma Paper Solved
4. Value of function in programming
5. Hardware components and device solved paper RGPV Diploma
6. USE CASE for MCQ application
7. OS Interview Q & A | Part 01 | Prof. Jayesh Umre
8. Compilation
9. OOPs in C# | PPL | Prof. Jayesh Umre
10. Overloaded subprograms
11. Static and Dynamic scope
12. Type Checking
13. Testing Levels | Software engineering | SEPM | Prof. Jayesh Umre
14. Static and Dynamic Analysis | Software Engineering| SEPM| Prof. Jayesh Umre

15. Code Inspection | Software engineering | SEPM | Prof. Jayesh Umre
16. Code Inspection
17. Characterstics of IOT
18. IOT Internet of Things
19. Monitors
20. Static and Stack-Based Storage management
21. Message passing
22. Exception handler in Java
23. Exception Propagation
24. Concept of Binding
25. Data mining and Data Warehousing
26. Introduction to Concurrency Control
27. Introduction to Transaction
28. Introduction to Data Models
29. Coaxial Cable
30. DHCP
31. DNS
32. Introduction to SNMP
33. Introduciton to SMTP
34. Introduction to NFS
35. Introduction to Telnet
36. Introduction to FTP
37. Internet Intranet Extranet
38. UGC NET Notes
39. Computer Terminologies
40. UGC NET Paper 1 December 2012
41. UGC Net paper 1 June 2011

42. Functional programming languages
43. Virtualization fundamental concept of compute
44. Dia software for UML, ER, Flow Chart etc
45. DAVV MBA: Business Communication
46. Mirroring and Striping
47. RGPV Solved Papers
48. CD#08 | Semantic analysis phase of compiler in Hindi video | Semantic tree | Symbol table | int to real
49. COA#27 | Explain the Memory Hierarchy in short. | COA previoys years in Hindi video
50. Infix to Postfix expression
51. Array implementation of Stack
52. Stack Data Structure
53. DBMS#03 | DBMS System Architecture in Hindi video
54. Java program method overloaing
55. Java program use of String
56. DS#33 | 2 Dimensional Array | Data Structure in Hindi video
57. SE#10 | Function point (FP) project size estimation metric in Hindi video
58. ADA#02 | Define Algorithm. Discuss how to analyse Algorithm | ADA previous years in Hindi video
59. Principles of Programming Languages
60. Discrete Structures
61. Machine Learning
62. R Programming Video Lectures
63. Internet of Things (IOT)
64. Digital Circuits
65. Number Systems
66. Computer Organization and Architecture Video Lectures

67. UGC NET
68. There are five bags each containing identical sets of ten distinct chocolates. One chocolate is picked from each bag.The probability that at least two chocolates are identical is _____
69. C Programming Questions
70. What is Software ? What is the difference between a software process and a software product ?
71. Difference between scopus and sci/scie journal
72. Human Process Interventions: Individual and Group Level & Organization Level Topics Covered: Coaching, training and development, conflict resolution process process consultation, third-party interventions, and team building.
73. Leading and Managing Change & Emerging Trends in OD
74. Designing and Evaluating Organization Development Interventions
75. Tutorial
76. Data Dictionary and Dynamic Performance Views
77. Anna University Notes | Big Data Analytics
78. What is Map Reduce programming model? Explain.
79. Features of Web 2.0
80. Describe in brief the different sources of water.
81. RGPV BEEE
82. Define data structure. Describe about its need and types.Why do we need a data type ?
83. Interview Tips
84. Find output of C programs Questions with Answers Set 01