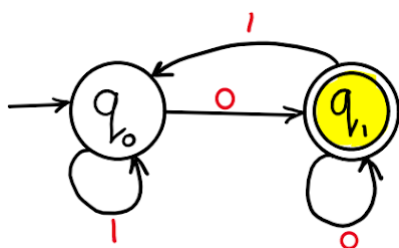


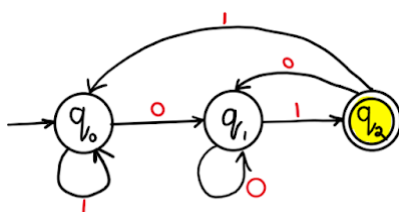
Example 1: Draw a DFA for the language accepting strings ending with '0' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



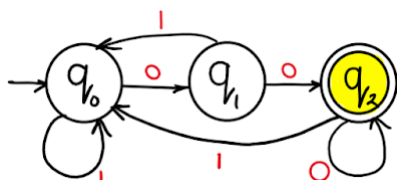
Example 2: Draw a DFA for the language accepting strings ending with '01' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



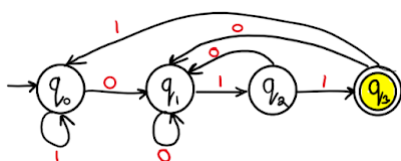
Example 3: Draw a DFA for the language accepting strings ending with '00' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



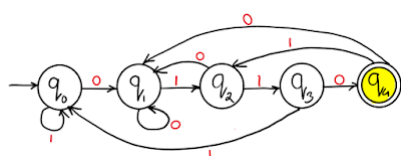
Example 4: Draw a DFA for the language accepting strings ending with '011' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



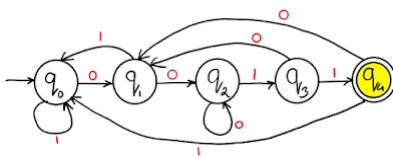
Example 5: Draw a DFA for the language accepting strings ending with '0110' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



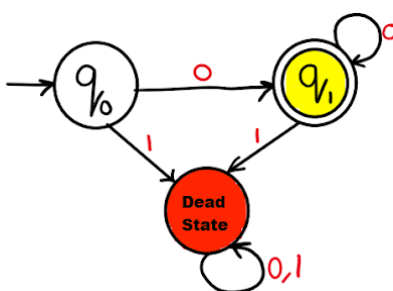
Example 6: Draw a DFA for the language accepting strings ending with '0011' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



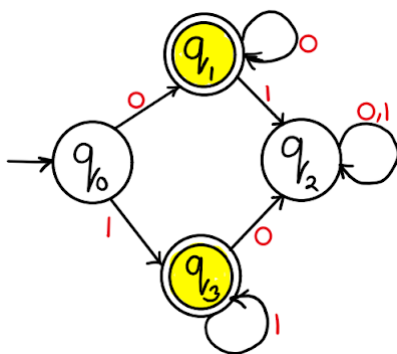
Example 7: Draw a DFA for the language accepting strings with '0' only over input alphabets $\Sigma = \{0, 1\}$?

Solution:



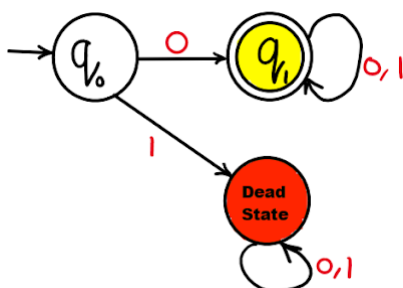
Example 8: Draw a DFA for the language accepting strings with '0' and '1' only over input alphabets $\Sigma = \{0, 1\}$?

Solution:



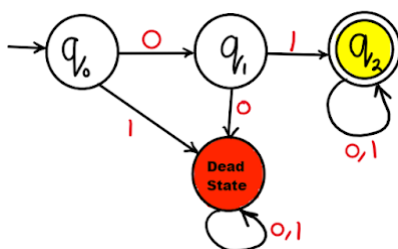
Example 9: Draw a DFA for the language accepting strings starting with '0' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



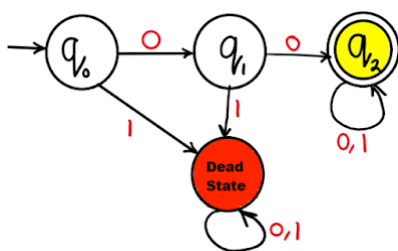
Example 10: Draw a DFA for the language accepting strings starting with '01' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



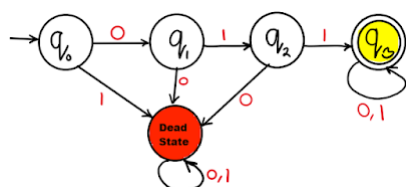
Example 11: Draw a DFA for the language accepting strings starting with '00' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



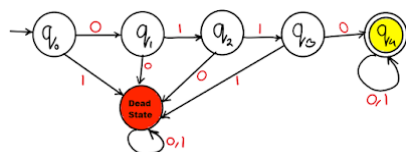
Example 12: Draw a DFA for the language accepting strings starting with '011' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



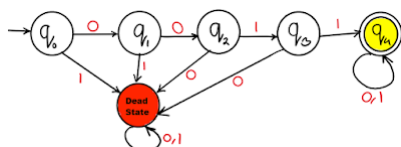
Example 13: Draw a DFA for the language accepting strings starting with '0110' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



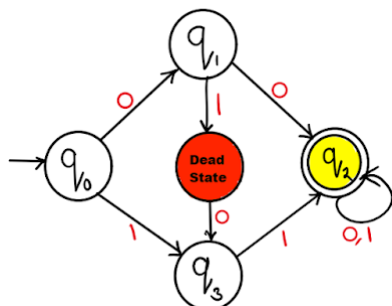
Example 14: Draw a DFA for the language accepting strings starting with '0011' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



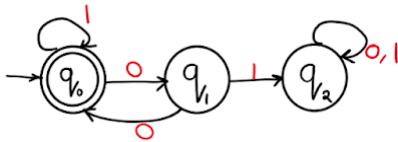
Example 15: Draw a DFA for the language accepting strings starting with '00' or '11' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



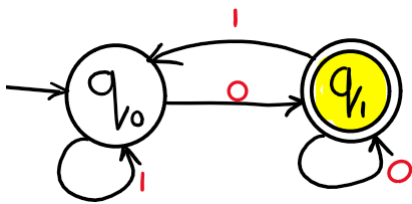
Example 16: Draw a DFA for the language accepting strings without substring '00' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



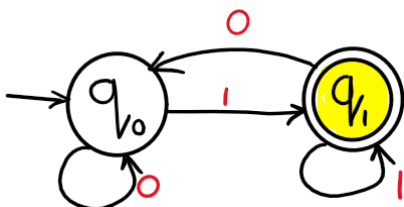
Example 17: Draw a DFA for the language accepting even binary numbers strings over input alphabets $\Sigma = \{0, 1\}$?

Solution:



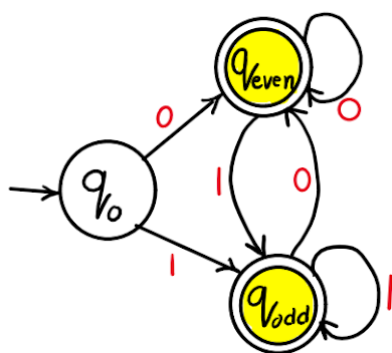
Example 18: Draw a DFA for the language accepting odd binary numbers strings over input alphabets $\Sigma = \{0, 1\}$?

Solution:



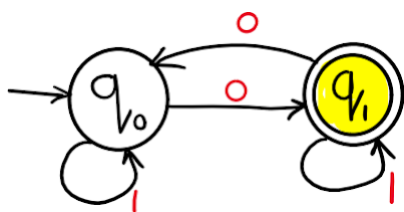
Example 19: Draw a DFA for the language accepting odd or even binary numbers strings over input alphabets $\Sigma = \{0, 1\}$?

Solution:



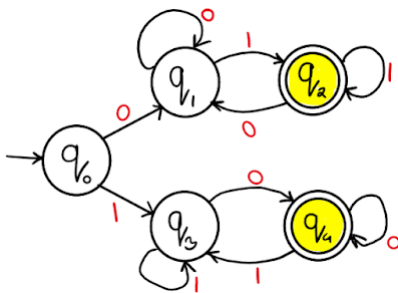
Example 20: Draw a DFA for the language accepting strings containing even number of total zeros over input alphabets $\Sigma = \{0, 1\}$?

Solution:



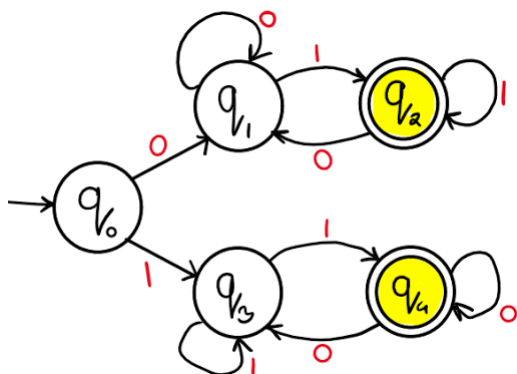
Example 21: Draw a DFA for the language accepting strings starting and ending with different characters over input alphabets $\Sigma = \{0, 1\}$?

Solution:



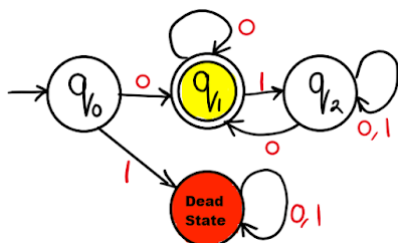
Example 22: Draw a DFA for the language accepting strings starting and ending with same character over input alphabets $\Sigma = \{0, 1\}$?

Solution:



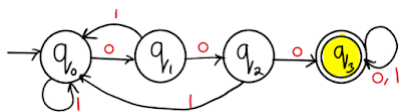
Example 23: Draw a DFA for the language accepting strings starting and ending with '0' always over input alphabets $\Sigma = \{0, 1\}$?

Solution:



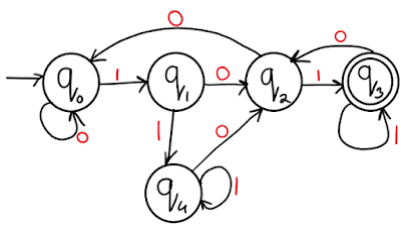
Example 24: Draw a DFA for the language accepting strings containing three consecutive '0' always over input alphabets $\Sigma = \{0, 1\}$?

Solution:



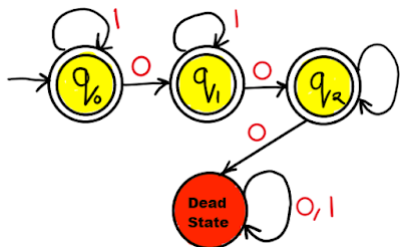
Example 25: Draw a DFA for the language accepting strings such that each '0' is immediately preceded and followed by '1' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



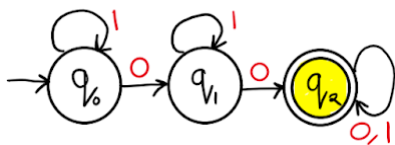
Example 26: Draw a DFA for the language accepting strings containing at most two '0' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



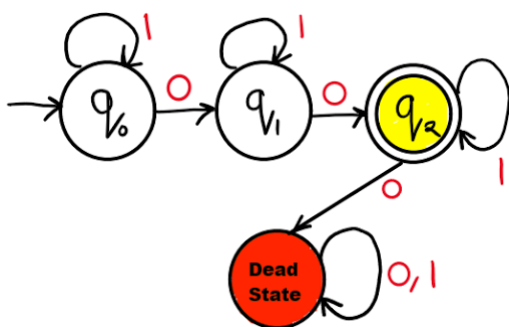
Example 27: Draw a DFA for the language accepting strings containing at least two '0' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



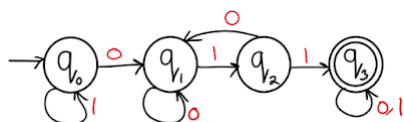
Example 28: Draw a DFA for the language accepting strings containing exactly two '0' over input alphabets $\Sigma = \{0, 1\}$?

Solution:



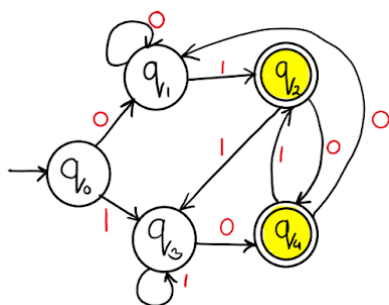
Example 29: Draw a DFA for the language accepting strings with '011' as substring over input alphabets $\Sigma = \{0, 1\}$?

Solution:



Example 30: Draw a DFA for the language accepting strings ending in either '01', or '10' over input alphabets $\Sigma = \{0, 1\}$?

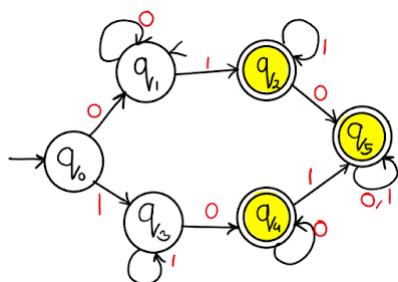
Solution:



Example 31: Draw a DFA for the language accepting strings containing '01', or '10' as

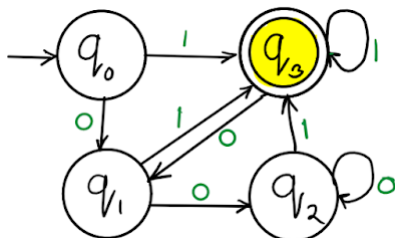
substring over input alphabets $\Sigma = \{0, 1\}$?

Solution:



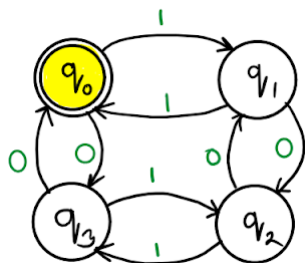
Example 32: Draw DFA that accepts any string which ends with 1 or it ends with an even number of 0's following the last 1. Alphabets are $\{0,1\}$.

Solution:



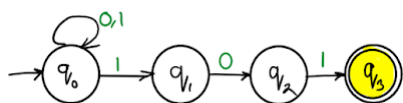
Example 33: Construct DFA accepting set of all strings containing even no. of a's and even no. of b's over input alphabet $\{a,b\}$.

Solution:



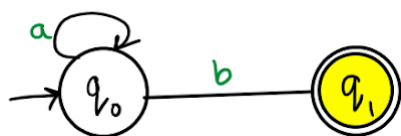
Example 34: Give DFA accepting the language over alphabet $\{0,1\}$ such that all strings of 0 and 1 ending in 101.

Solution:



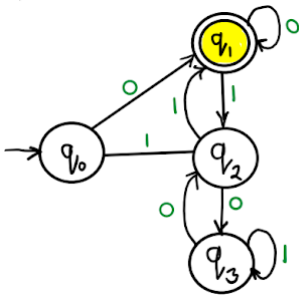
Example 35: Construct DFA for $anb \mid n \geq 0$.

Solution:



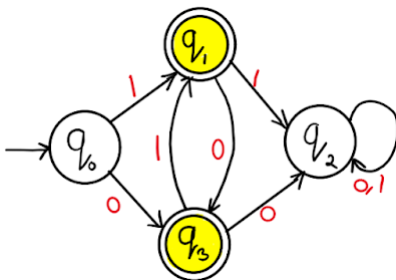
Example 36: construct DFA for binary integer divisible by 3 ?

Solution:



Example 37: Draw a DFA for the language accepting strings containing neither '00', nor '11' as substring over input alphabets $\Sigma = \{0, 1\}$?

Solution:



Related posts:

1. Definition of Deterministic Finite Automata
2. Notations for DFA
3. How do a DFA Process Strings?
4. Definition Non Deterministic Finite Automata
5. Moore machine
6. Mealy Machine
7. Regular Expression Examples

8. Regular expression
9. Arden's Law
10. NFA with ϵ -Moves
11. NFA with ϵ to DFA Indirect Method
12. Define Mealy and Moore Machine
13. What is Trap state ?
14. Equivalent of DFA and NFA
15. Properties of transition functions
16. Mealy to Moore Machine
17. Moore to Mealy machine
18. Difference between Mealy and Moore machine
19. Pushdown Automata
20. Remove ϵ transitions from NFA
21. TOC 1
22. Difference between Mealy and Moore machine
23. RGPV TOC What do you understand by DFA how to represent it
24. What is Regular Expression
25. What is Regular Set in TOC
26. RGPV short note on automata
27. RGPV TOC properties of transition functions
28. RGPV TOC What is Trap state
29. DFA which accept 00 and 11 at the end of a string
30. CFL are not closed under intersection
31. NFA to DFA | RGPV TOC
32. Moore to Mealy | RGPV TOC PYQ
33. DFA accept even 0 and even 1 | RGPV TOC PYQ
34. Short note on automata | RGPV TOC PYQ

35. DFA ending with 00 start with 0 no epsilon | RGPV TOC PYQ

36. DFA ending with 101 | RGPV TOC PYQ

37. Construct DFA for a power n , $n \geq 0$ || RGPV TOC

38. Construct FA divisible by 3 | RGPV TOC PYQ

39. Construct DFA equivalent to NFA | RGPV TOC PYQ

40. RGPV Define Mealy and Moore Machine

41. RGPV TOC Short note on equivalent of DFA and NFA

42. RGPV notes Write short note on NDFA

43. Minimization of DFA

44. Construct NFA without ϵ

45. CNF from $S \rightarrow aAD; A \rightarrow aB/bAB; B \rightarrow b, D \rightarrow d$.

46. NDFA accepting two consecutive a's or two consecutive b's.

47. Regular expression to CFG

48. Regular expression to Regular grammar

49. Grammar is ambiguous. $S \rightarrow aSbS|bSaS|\epsilon$

50. leftmost and rightmost derivations

51. Construct Moore machine for Mealy machine

52. RGPV TOC PYQs

53. Introduction to Automata Theory