

L5-DFSA-Recognition

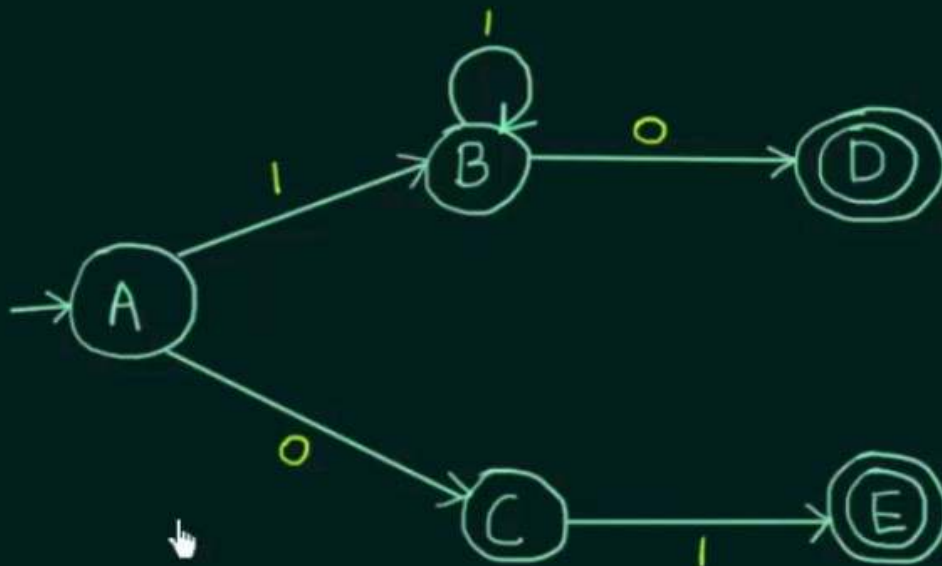
Deterministic Finite Automata (Example-4)

How to figure out what a DFA recognizes?

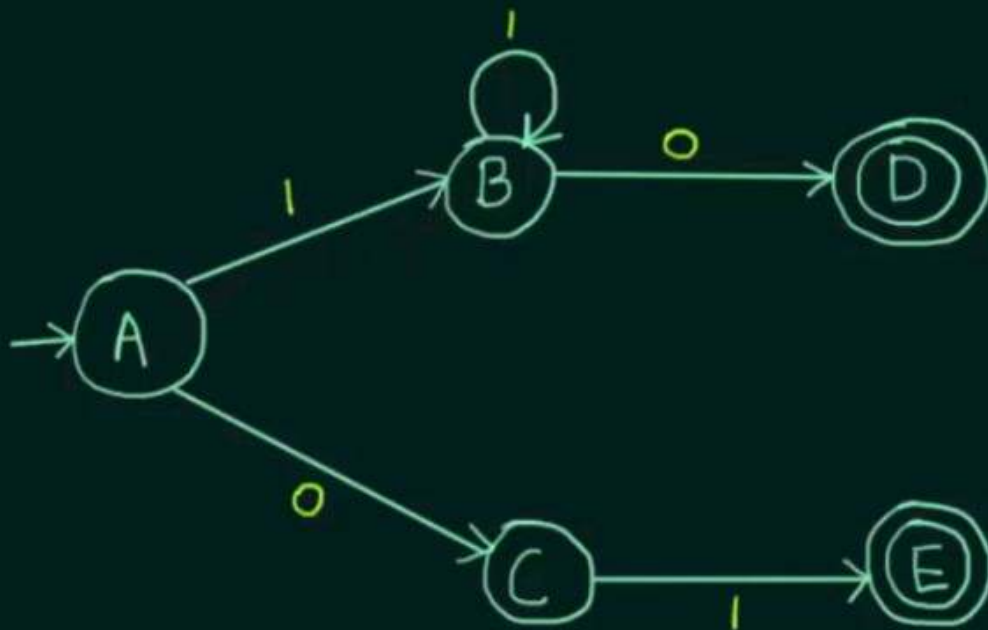


Deterministic Finite Automata (Example-4)

How to figure out what a DFA recognizes?



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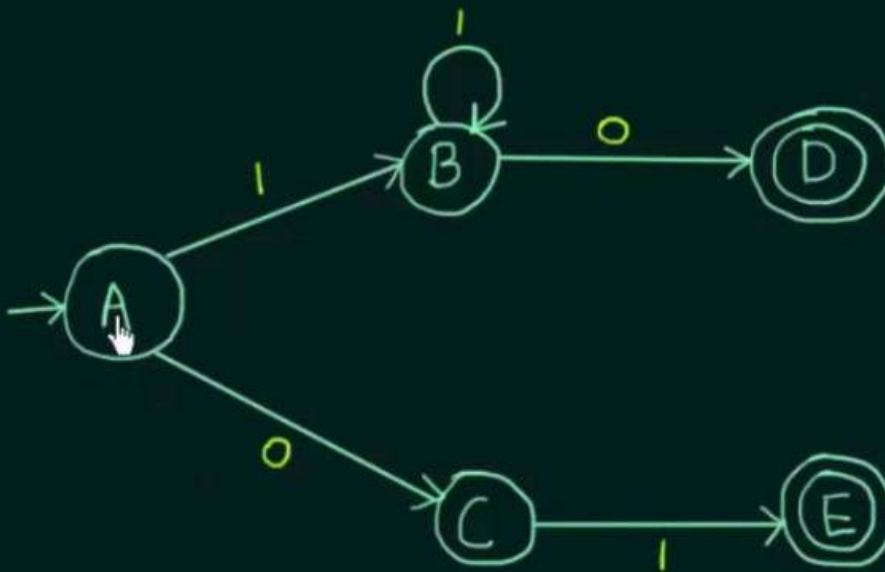


10 ✓



Deterministic Finite Automata (Example-4)

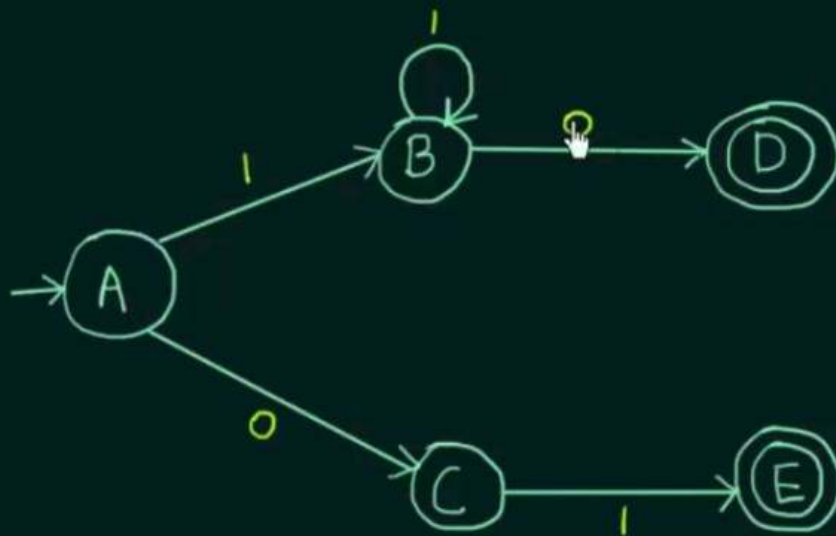
How to figure out what a DFA recognizes?



10 ✓
11110 ✓
↑ ↑ ↑
A B D

Deterministic Finite Automata (Example-4)

How to figure out what a DFA recognizes?



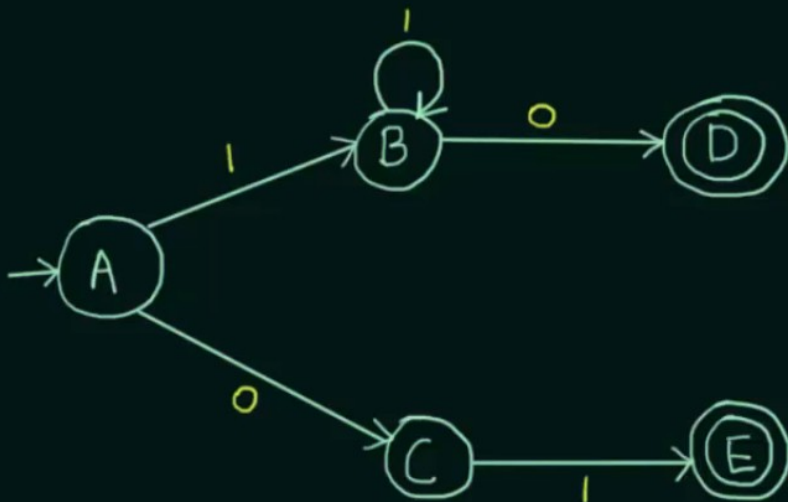
10 ✓

111110 ✓
↑ ↑ ↑
A B D

01 ✓

Deterministic Finite Automata (Example-4)

How to figure out what a DFA recognizes?



10 ✓
111110 ✓
↑ ↑ ↑
A B D

01 ✓

one binary digit '1'

$L = \{\text{Accepts the string } 01 \text{ or a string of at least one '1' followed by a '0'}\}$





10 ✓

111110 ✓
 ↑ ↑ ↑
 A B D

01 ✓

one binary digit '1'

$L = \{\text{Accepts the string } 01 \text{ or a string of at least one '1' followed by a '0'}\}$

Eg. 001, 010, 011, 1101, 1100





10 ✓
 111110 ✓
 ↑ ↑ ↑
 A B D
 01 ✓

one binary digit '1'

$L = \{\text{Accepts the string } 01 \text{ or a string of at least one '1' followed by a '0'}\}$

Eg. 001, 010, 011, 1101, 1100

X - Dead state



• **Questions????**