L9-NFA-DFA Conversion

Every DFA is an NFA, but not vice versa



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$$S = Q \times 2 \rightarrow Q$$

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Every DFA is an NFA, but not vice versa

But there is an equivalent DFA for every NFA

$$S = Q \times 2 \rightarrow Q$$

$$S = Q \times 2 \rightarrow Q^{0}$$



Every DFA is an NFA, but not vice versa



Every DFA is an NFA, but not vice versa

But there is an equivalent DFA for every NFA

$$S = Q \times Z \rightarrow Q$$

$$S = Q \times Z \rightarrow Z^{Q}$$



Every DFA is an NFA, but not vice versa

But there is an equivalent DFA for every NFA

NFA
$$S = Q \times 2 \rightarrow 2^{Q}$$



Every DFA is an NFA, but not vice versa

But there is an equivalent DFA for every NFA

NFA
$$S = Q \times 2 \rightarrow 2^{Q}$$



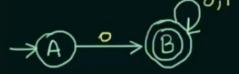


L = { Set of all strings over (0,1) that starts with '0' }





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| | 0 | -1 | |
|---|---|----|--|
| A | В | φ | |
| В | B | В | |



AFA



| | 0 | 1 | |
|---|---|----|--|
| Α | В | Lφ | |
| В | В | В | |

OF A

AFA



| | 0 | 1 | |
|---|---|---|--|
| A | В | φ | |
| В | B | В | |

DFA

AFA



| | 0 | 1 | |
|---|---|---|--|
| A | В | φ | |
| В | B | В | |

DFA

AFA



| | 0 | 1 | |
|---|---|---|--|
| A | В | φ | |
| В | B | В | |

DFA

| | 0 | 1 | |
|---|---|---|--|
| A | B | С | |
| B | B | B | |
| C | , | ь | |

AFA



| | 0 | 1 | |
|---|---|---|--|
| A | В | φ | |
| В | B | В | |

DFA

| | 0 | 1 | |
|---|---|---|--|
| A | B | С | |
| B | B | B | |
| C | C | C | |



| | 0 | - 1 | |
|---|---|-----|--|
| A | В | ф | |
| B | B | В | |

L = { Set of all strings over (0,1) that starts with '0' }

AFA



| | 0 | 1 | |
|---|---|---|--|
| A | В | φ | |
| В | B | B | |

L = { Set of all strings over (0,1) that starts with '0' }

AFA



| | 0 | - 1 | |
|---|---|-----|--|
| A | B | φ | |
| В | В | В | |

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AFA



| | 0 | 1 | |
|---|---|---|--|
| A | B | φ | |
| B | В | В | |

• Questions????