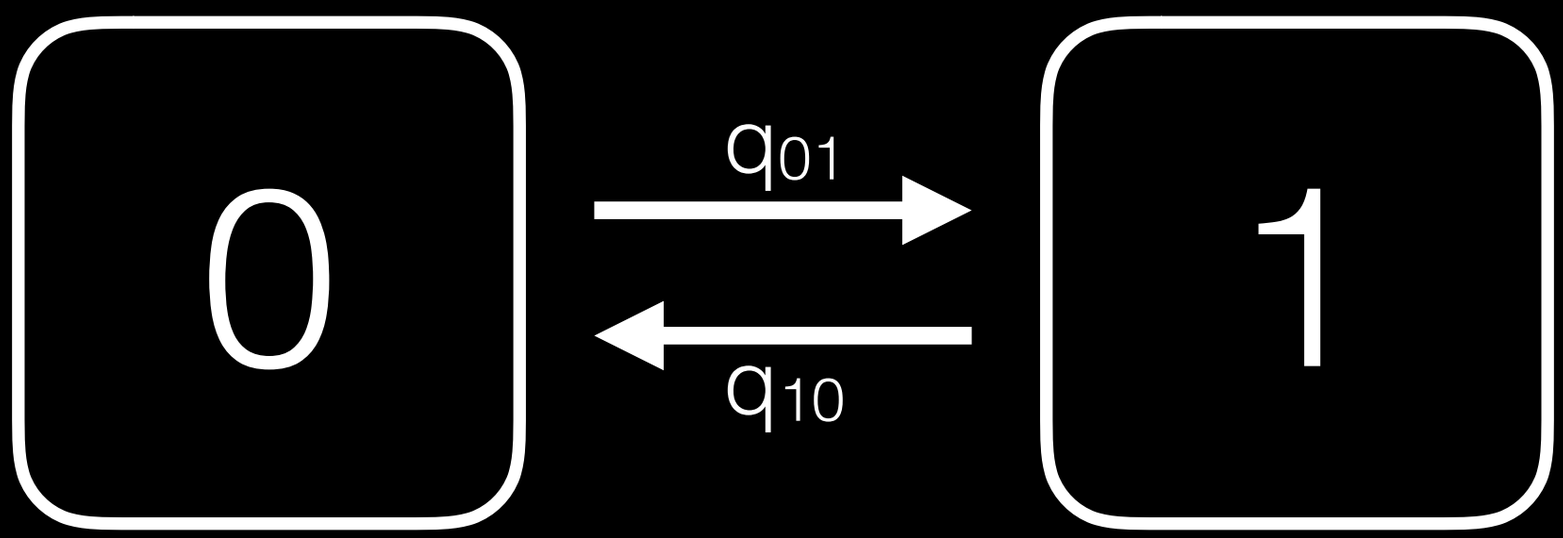
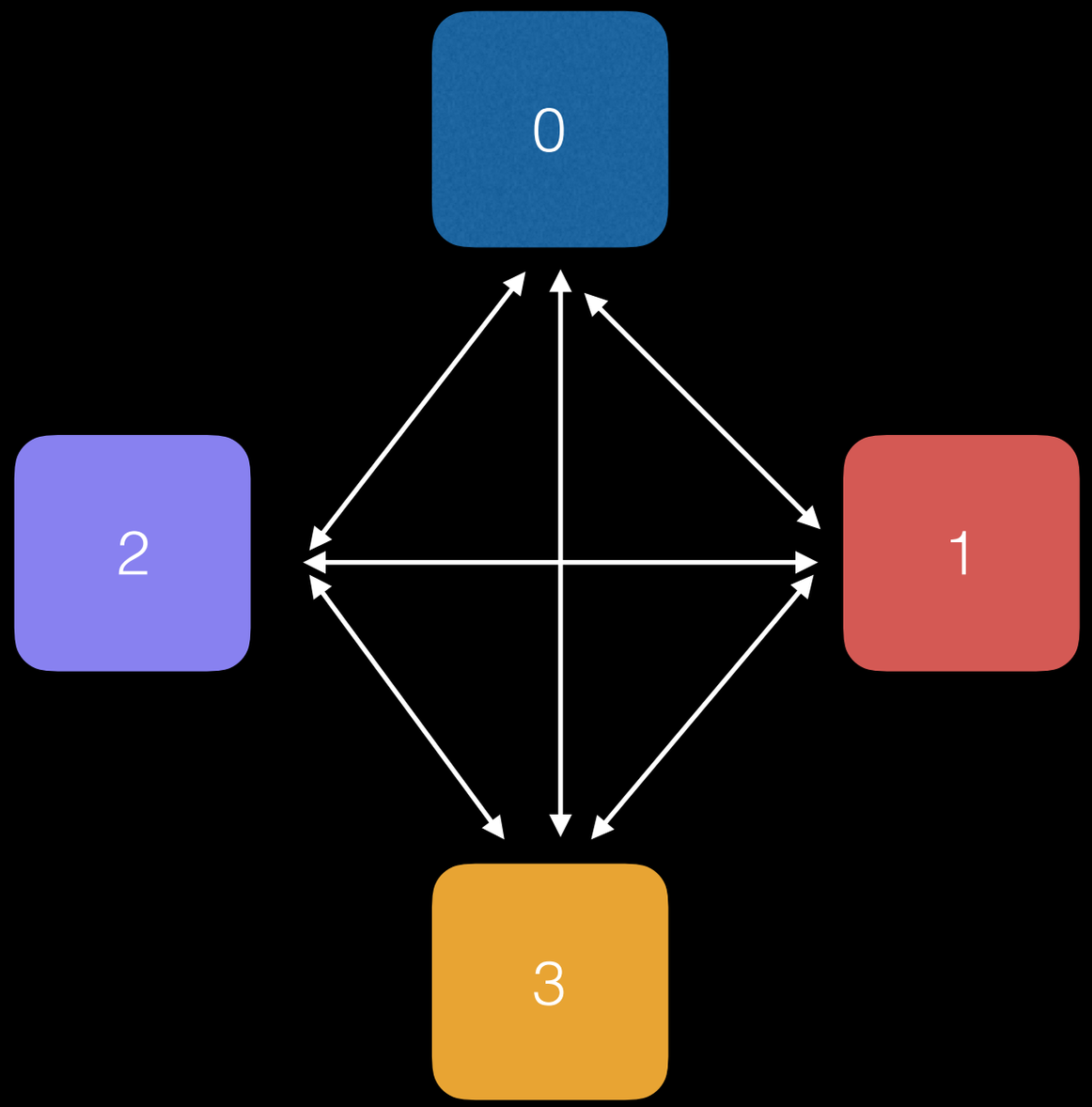
Correlated Evolution for Discrete Characters


0
1
q_{01}
q_{10}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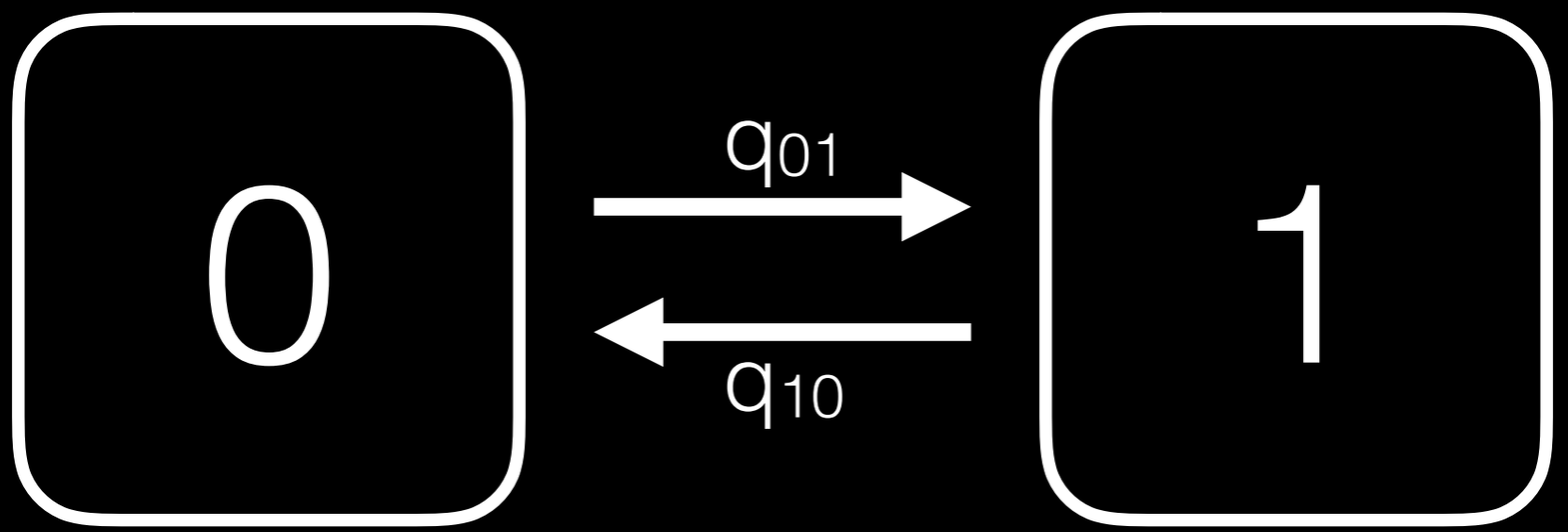
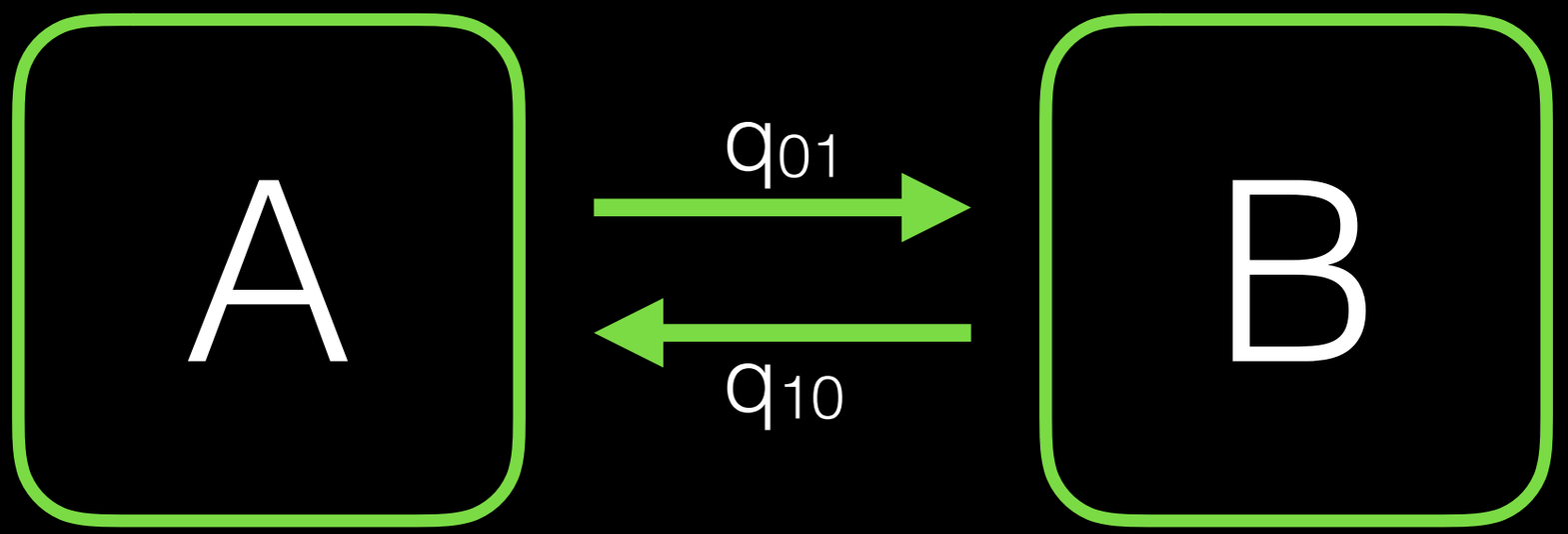
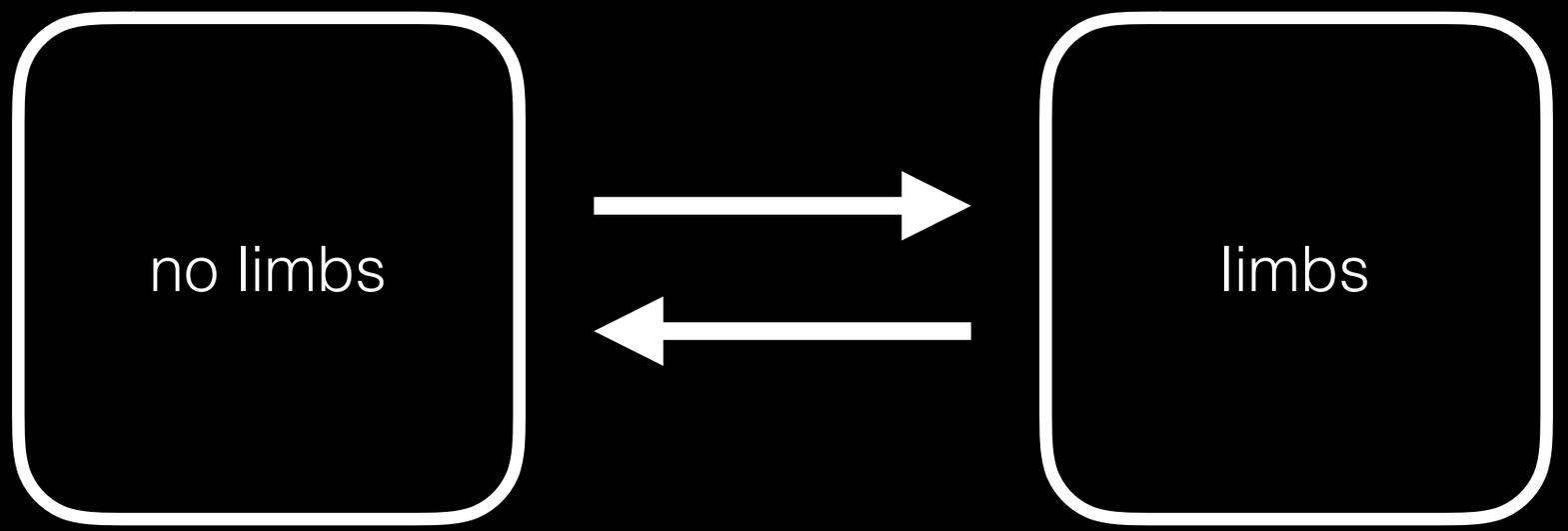
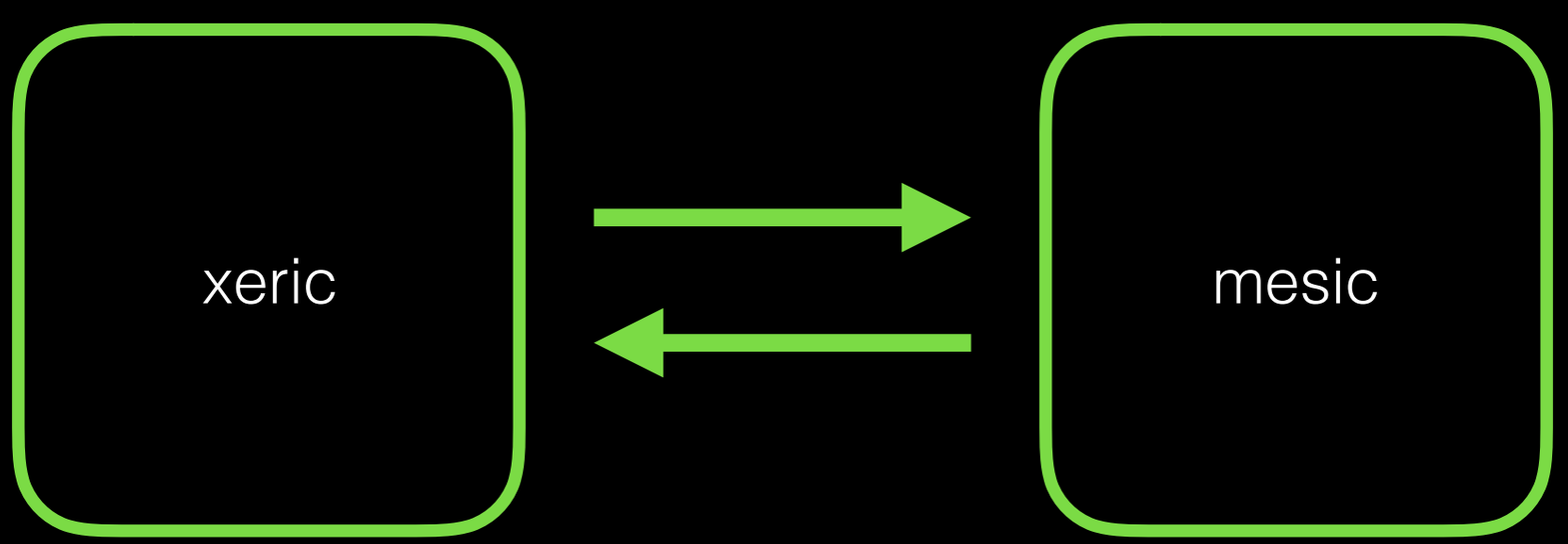




Correlated or not?

Lialis burtonis





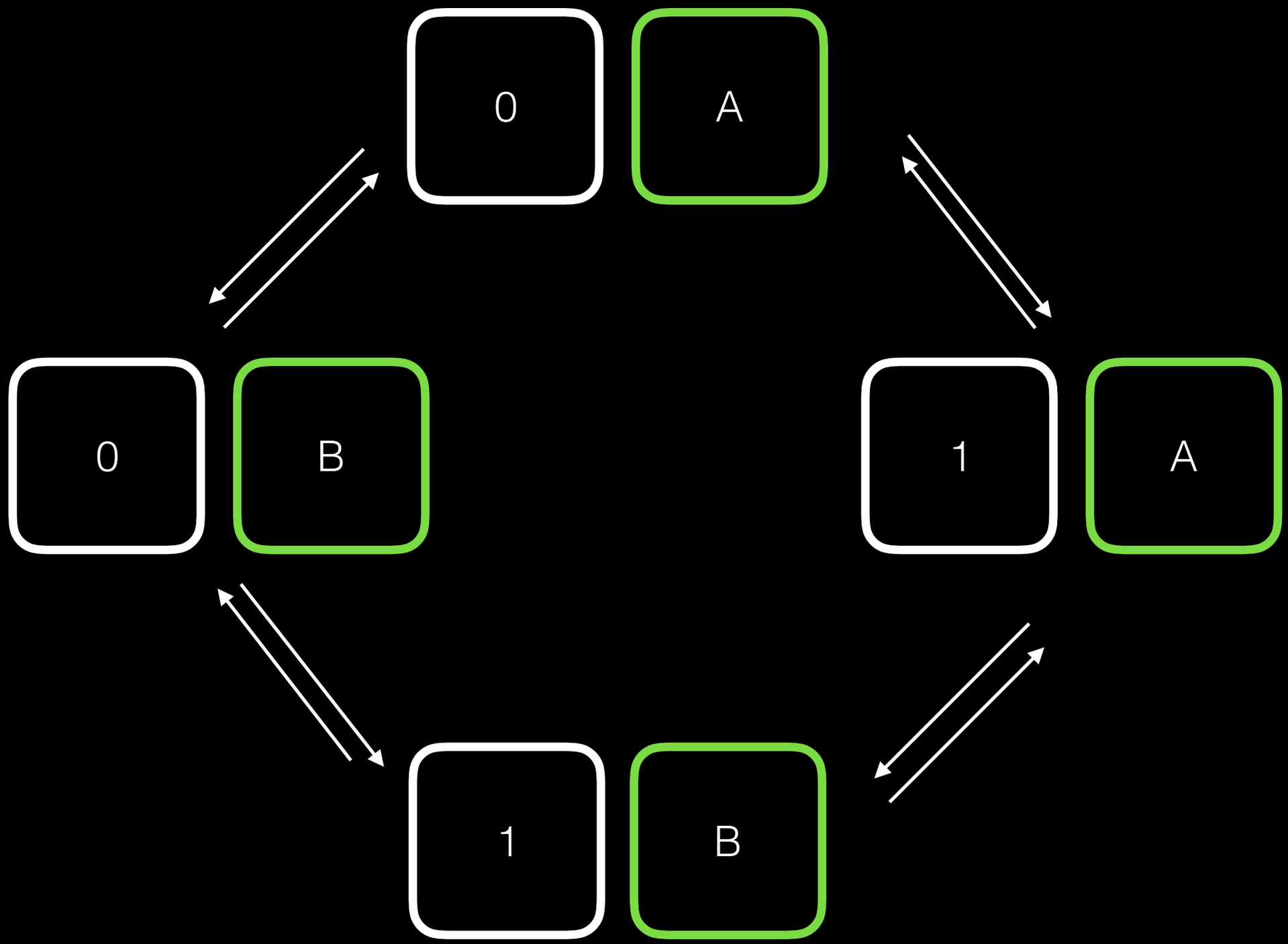
Correlated or not?

0

1

A

B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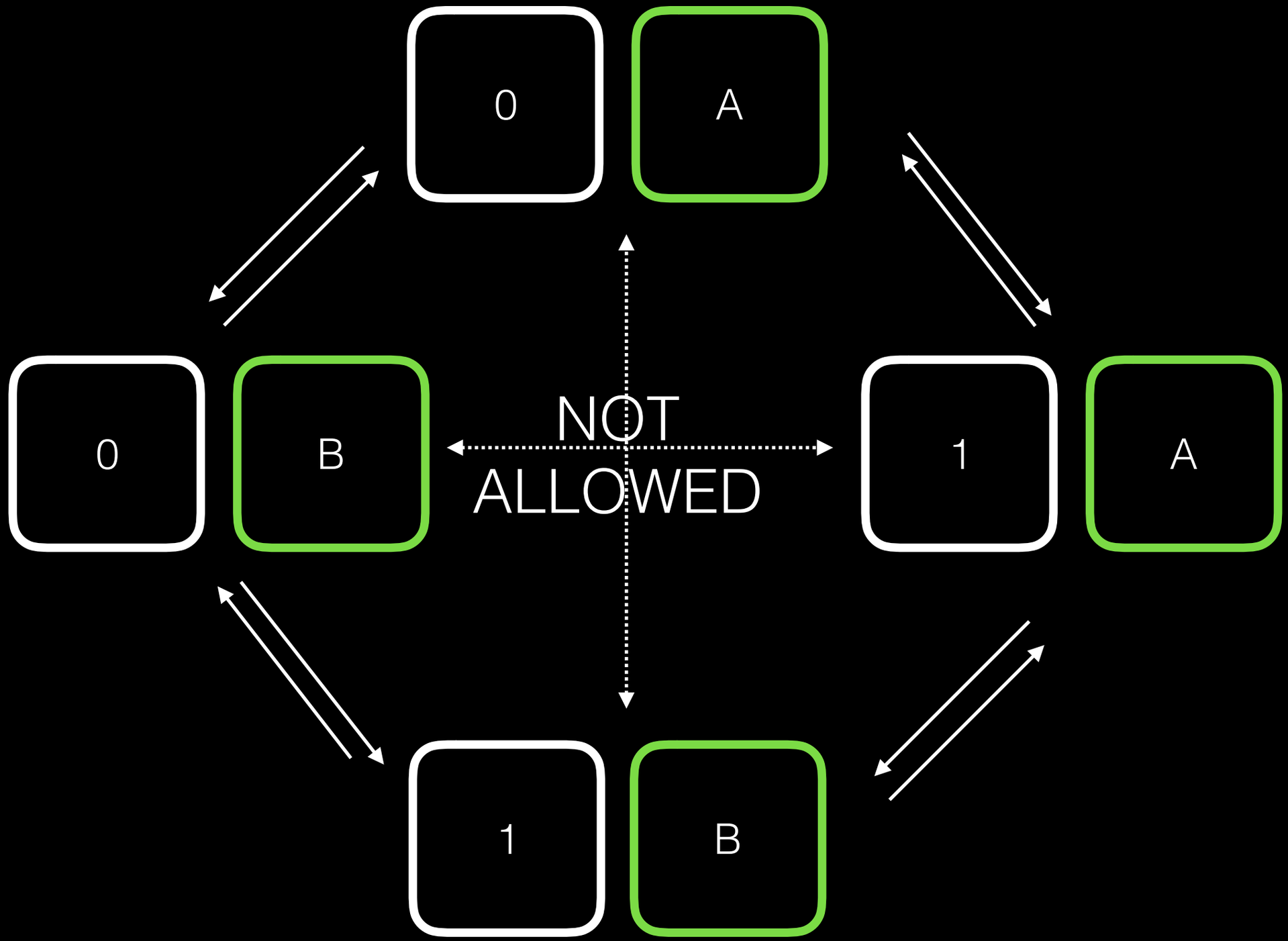
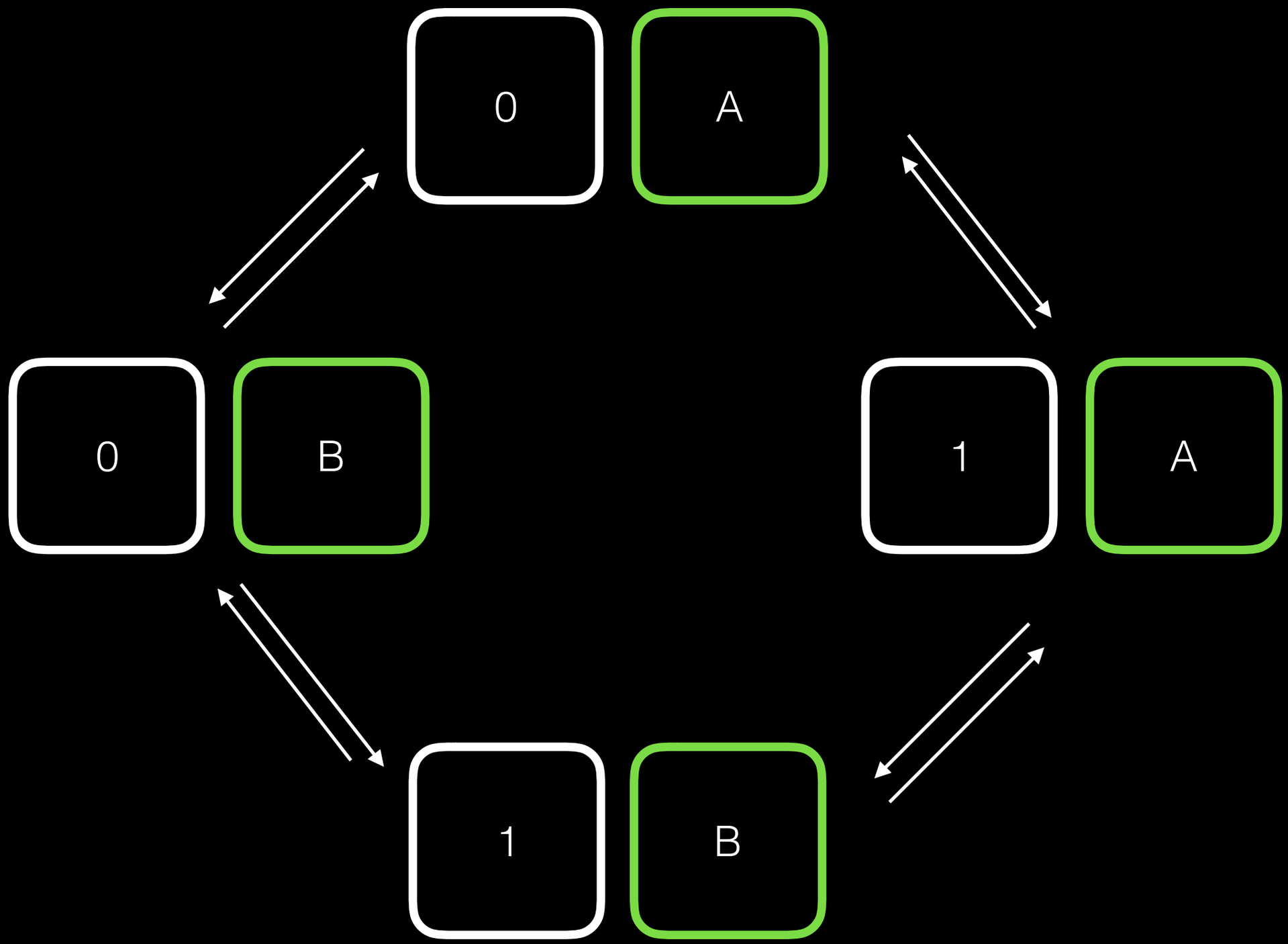
A
0
B
1
A
1
B


0
A
0
B
NOT
ALLOWED
1
A
1
B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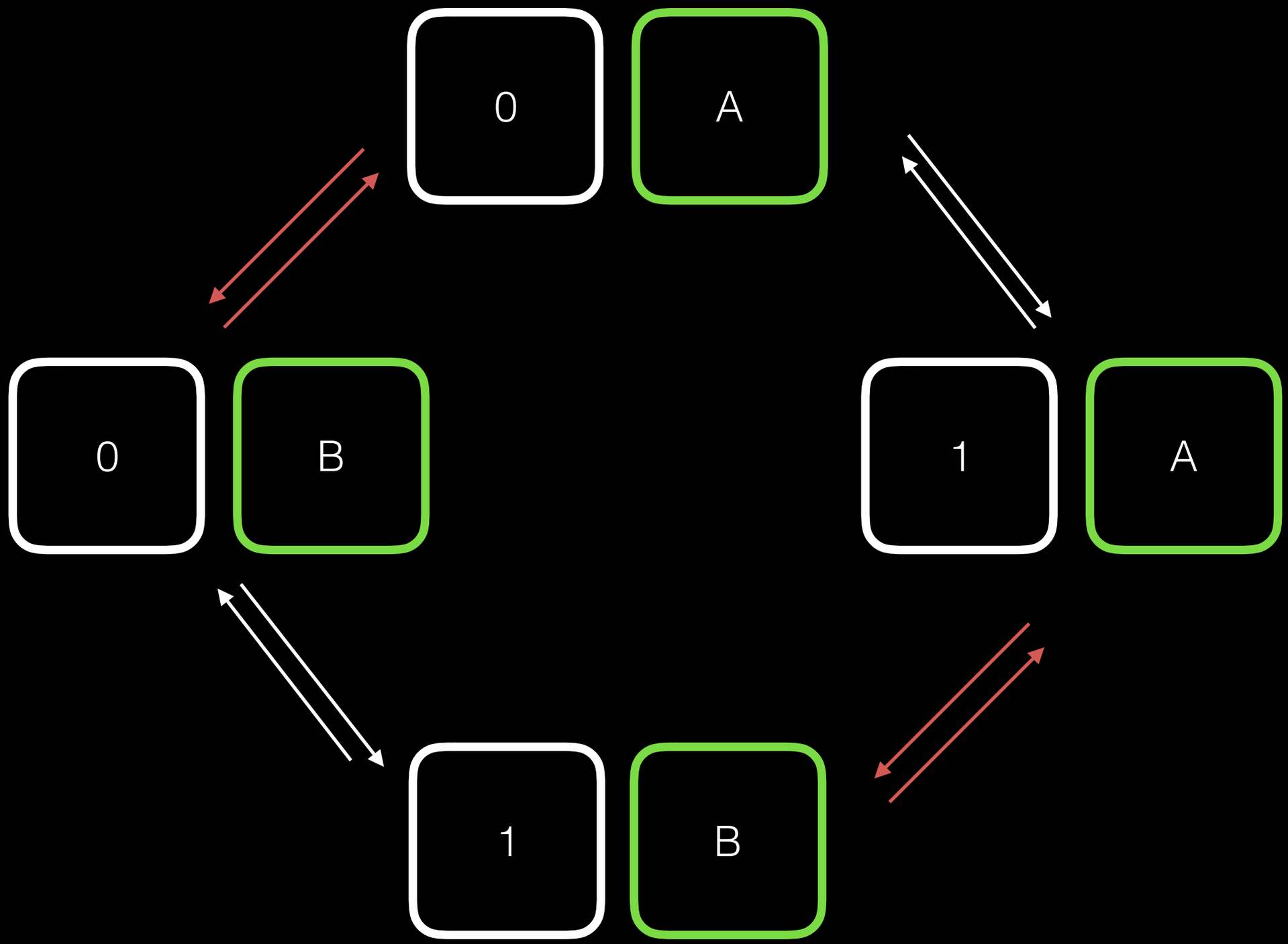
A
0
B
1
A
1
B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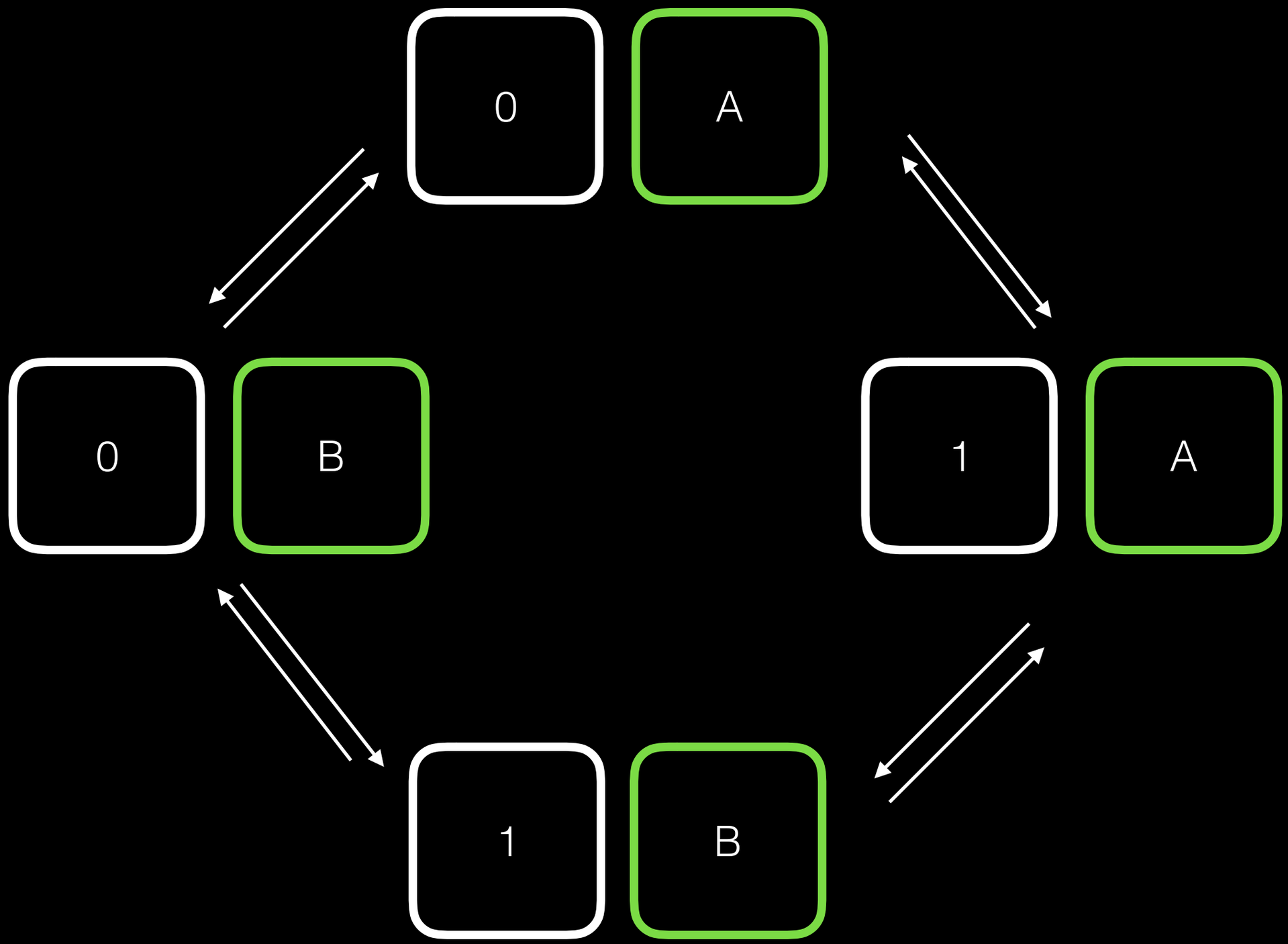
A
0
B
1
A
1
B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A
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B
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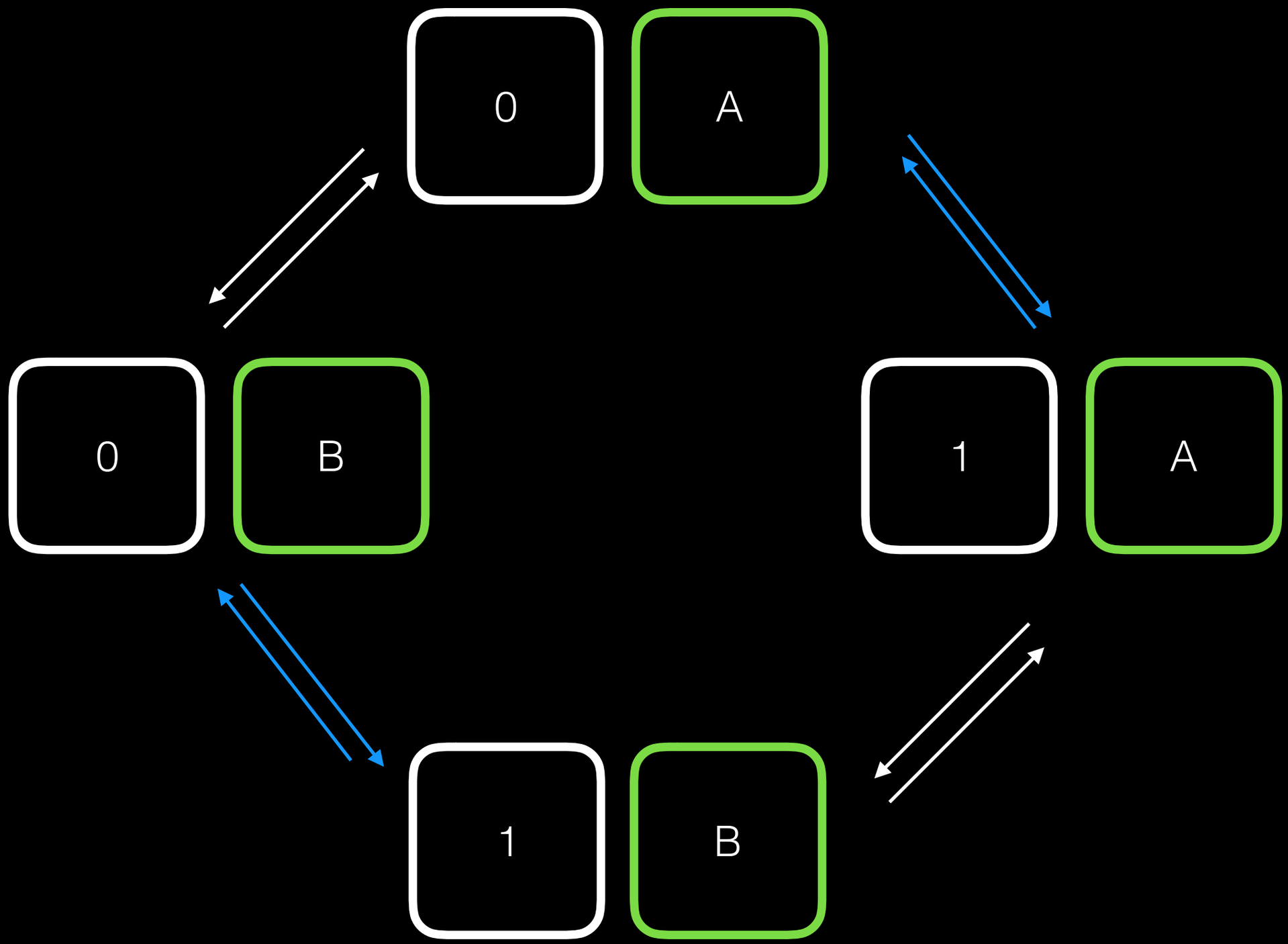
A
1
B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A
0
B
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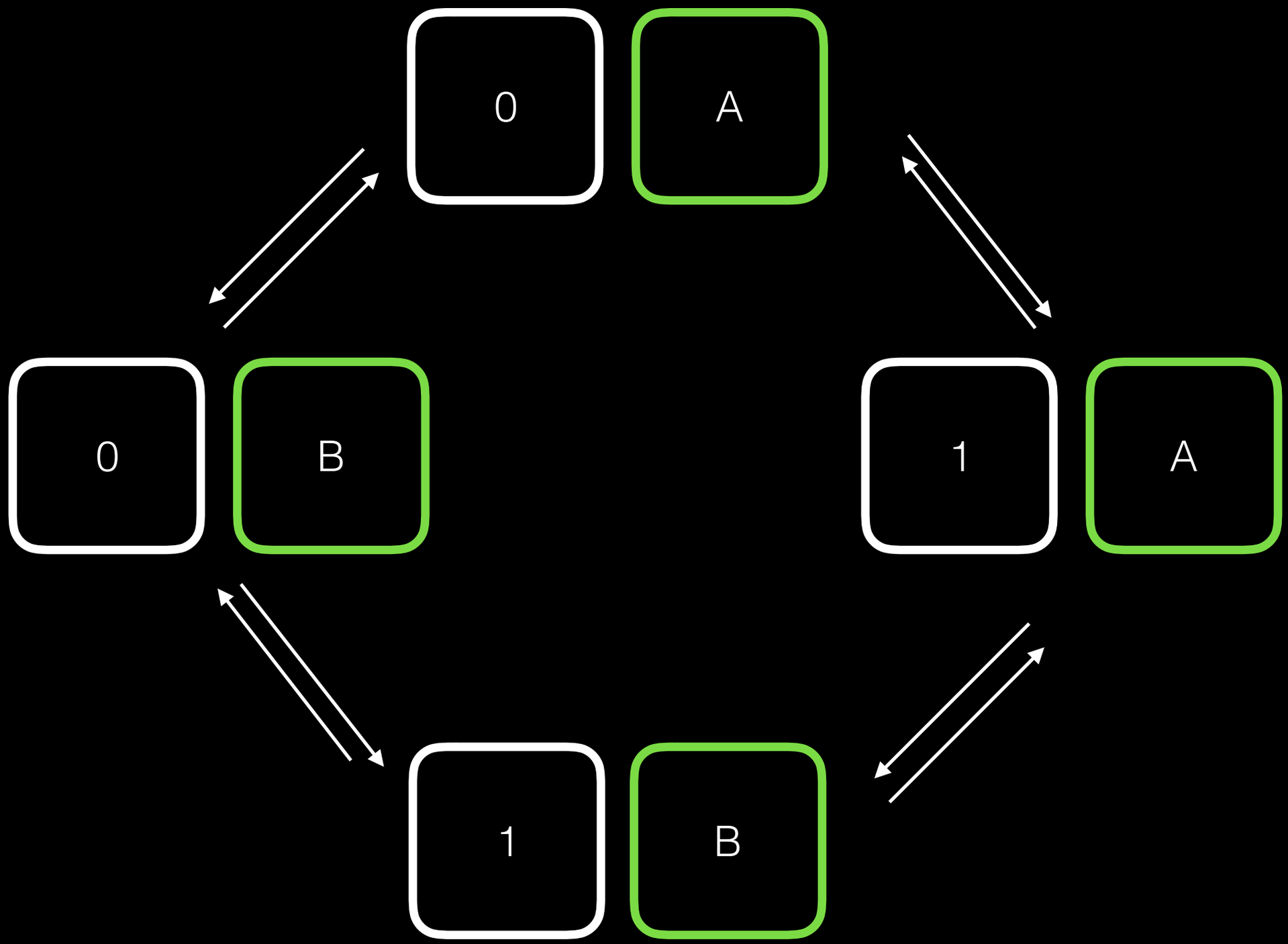
A
1
B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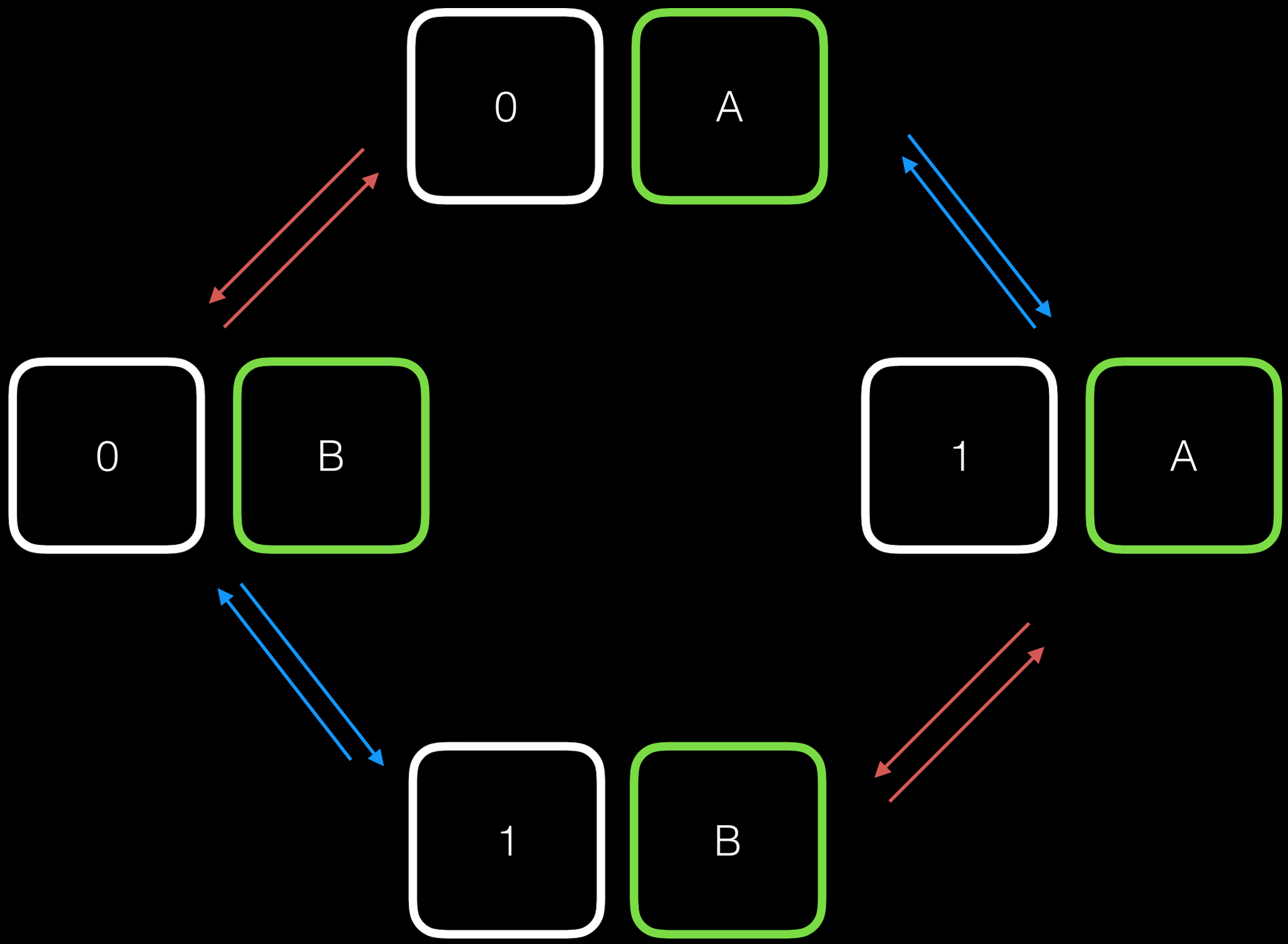
A
0
B
1
A
1
B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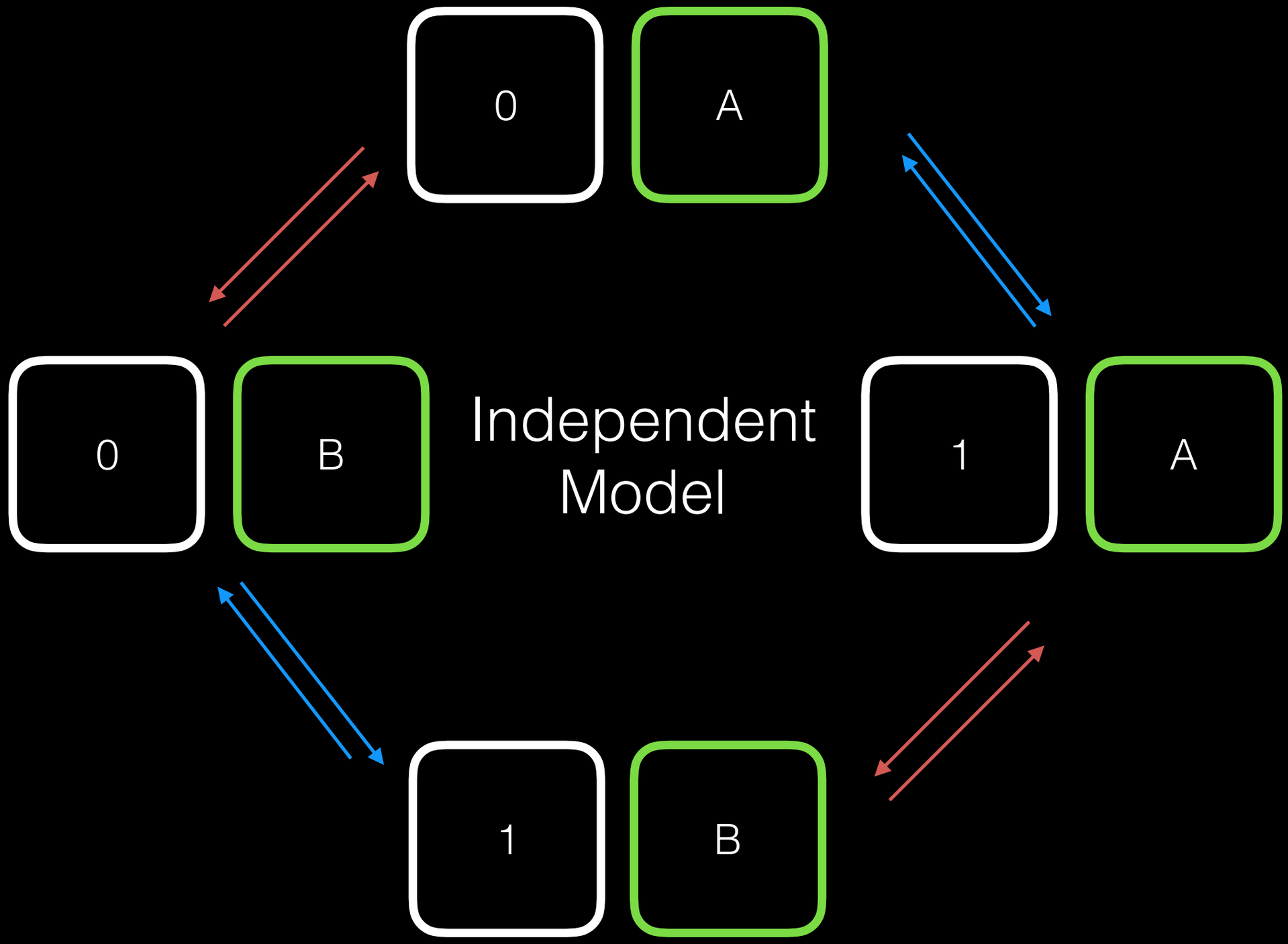
B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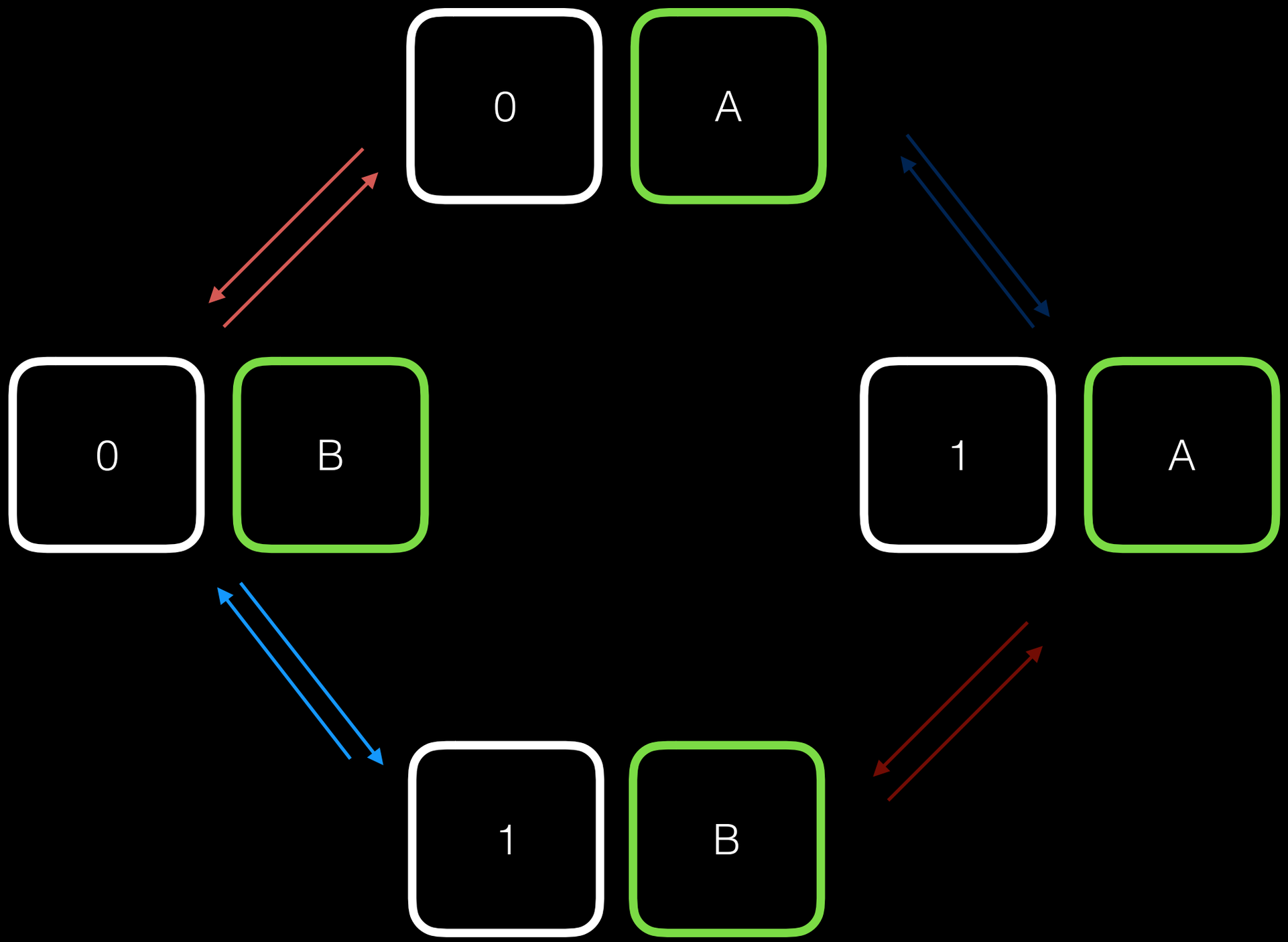
A
0
B
Independent
Model
1
A
1
B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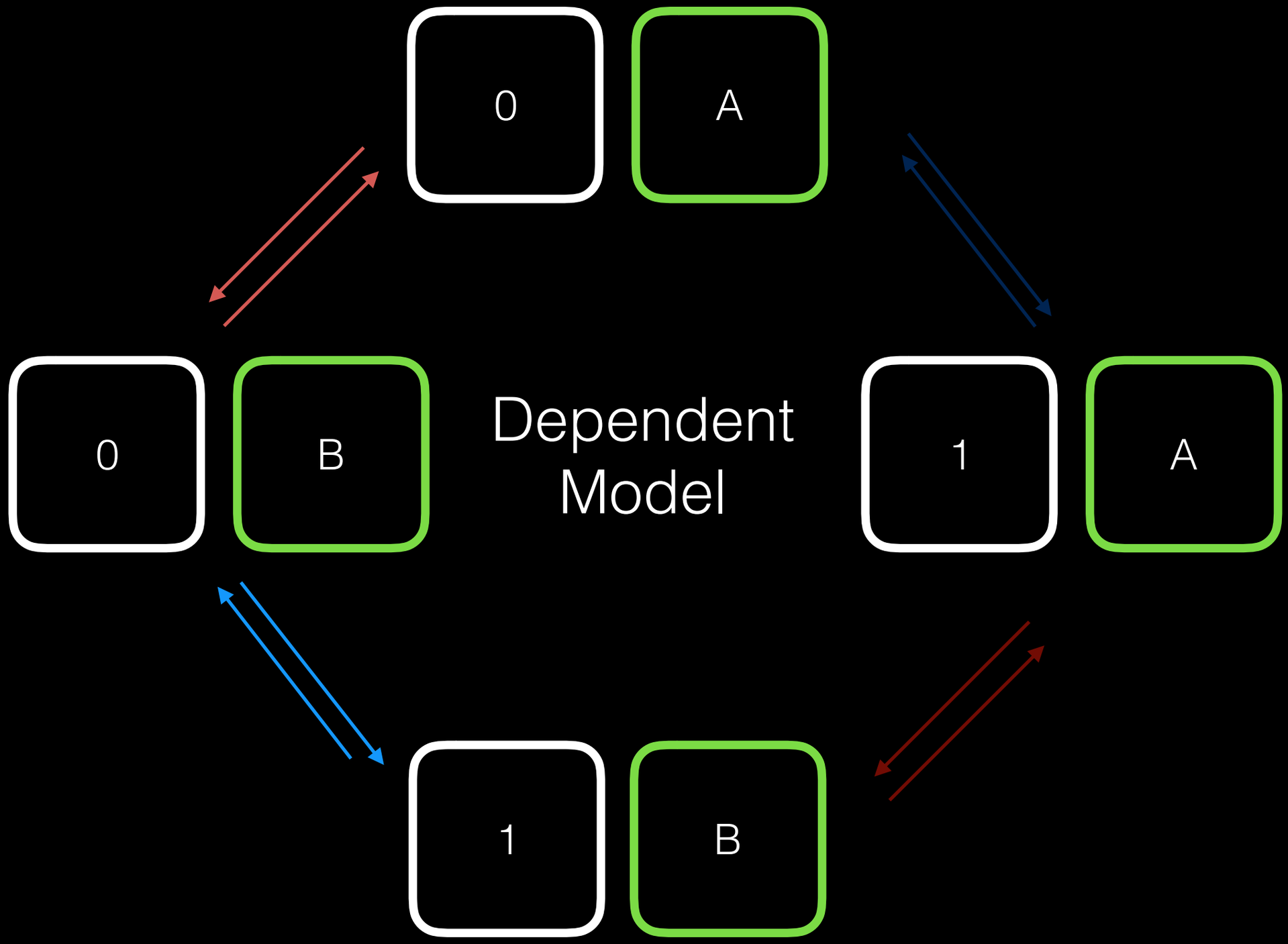
0
B
1
A
1
B


0
A
0
B
Dependent
Model
1
A
1
B

Independent Model

vs.

Dependent Model

Independent Model

vs.

Dependent Model

Likelihood ratio test,
AICc, etc.

Correlated Evolution for Discrete Characters