

order 1: AAA AAB ABA ABB BAA BAB BBA BBB

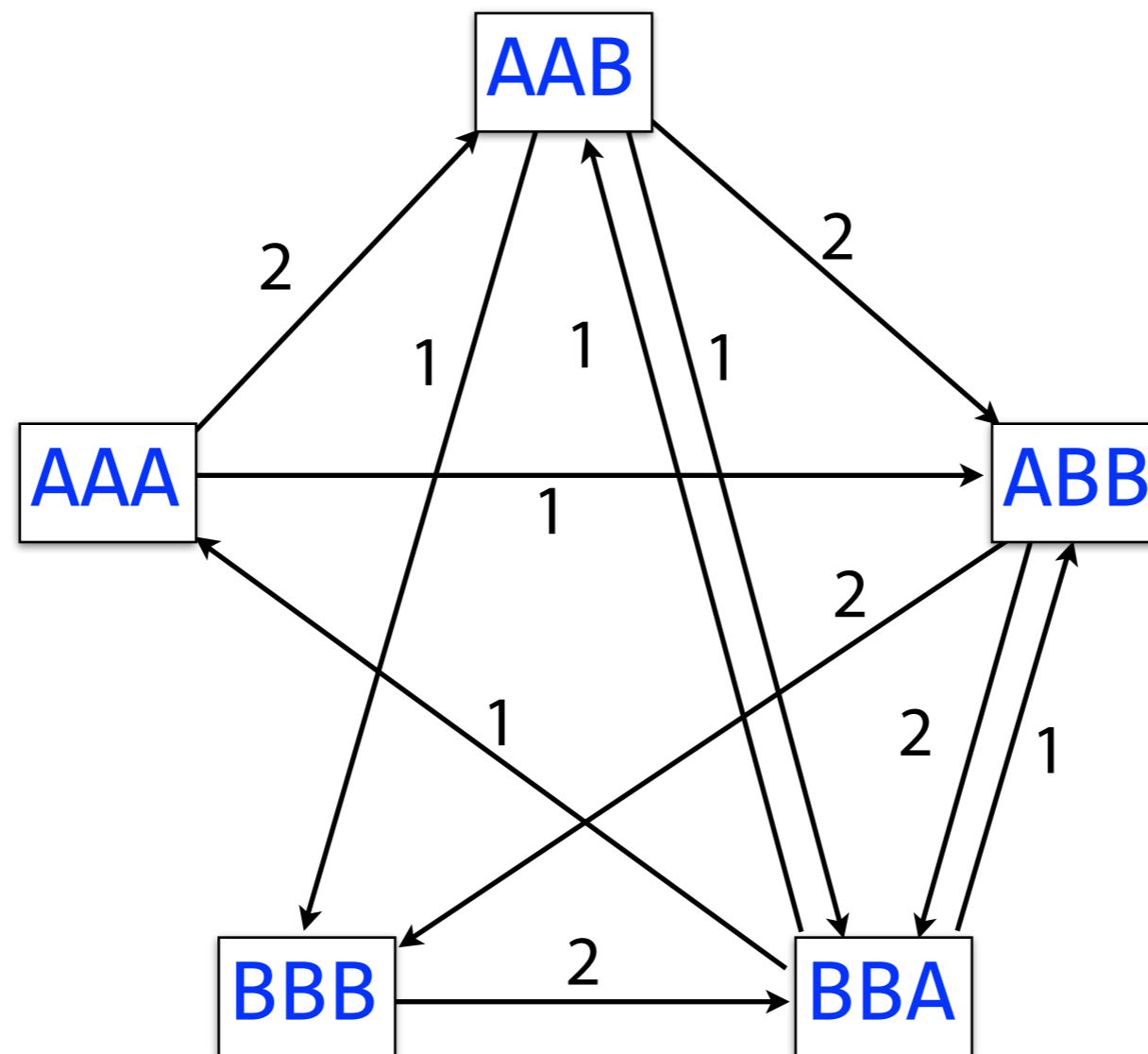
AAABABBAABABBABBB ← superstring 1

order 2: AAA AAB ABA BAB ABB BBB BAA BBA

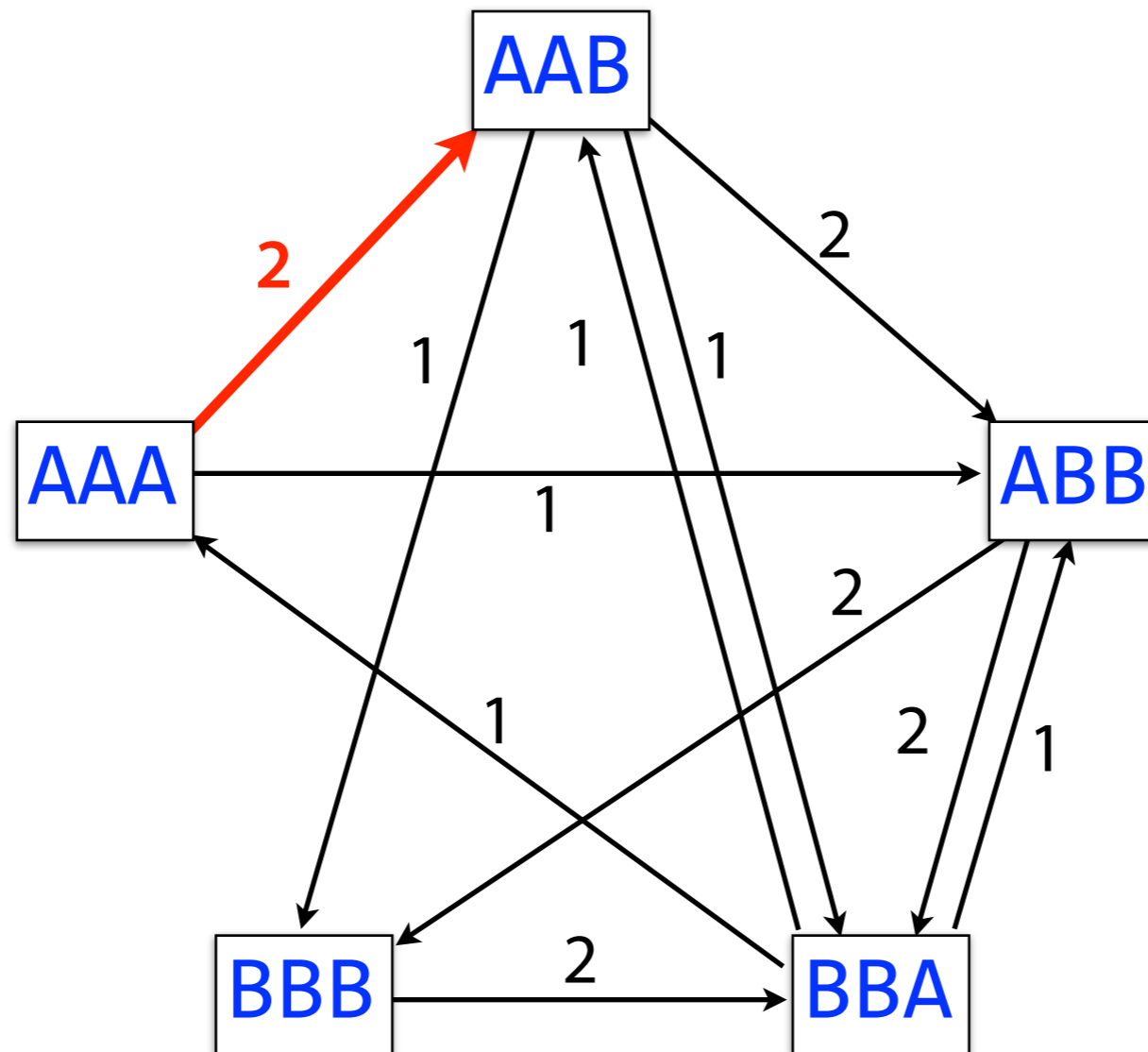
AAABABBBBAABBA ← superstring 2

If S contains n strings, $n!$ (n factorial) orderings possible

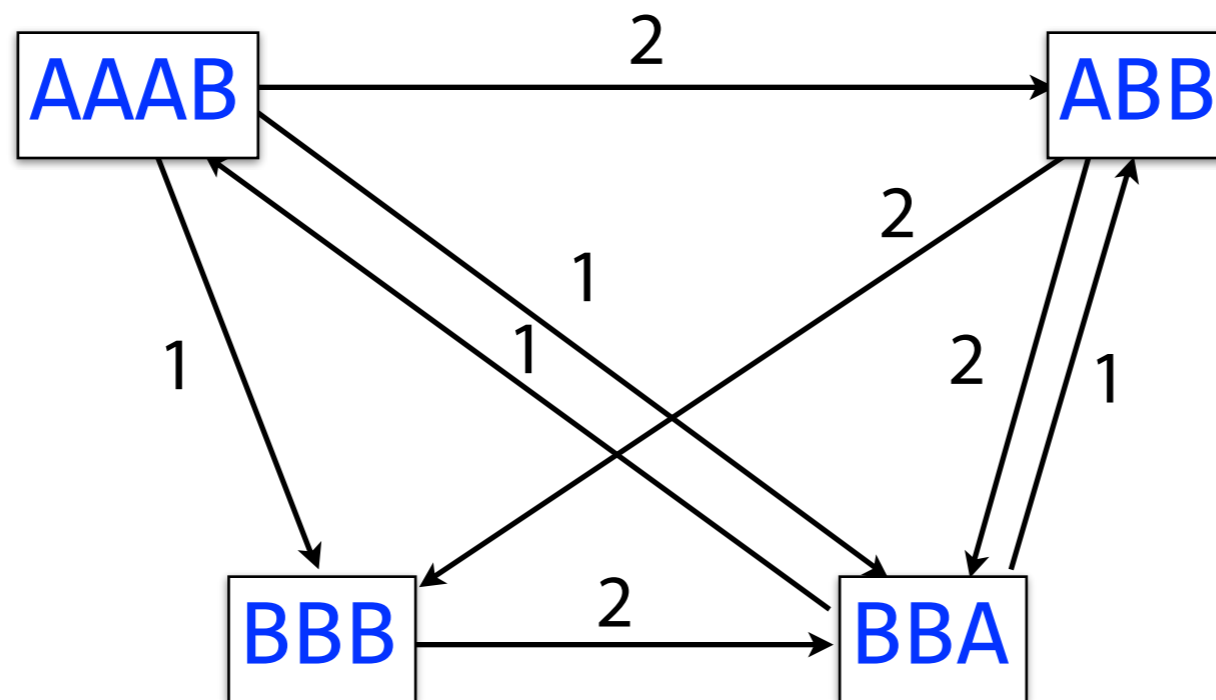
Greedy shortest common superstring



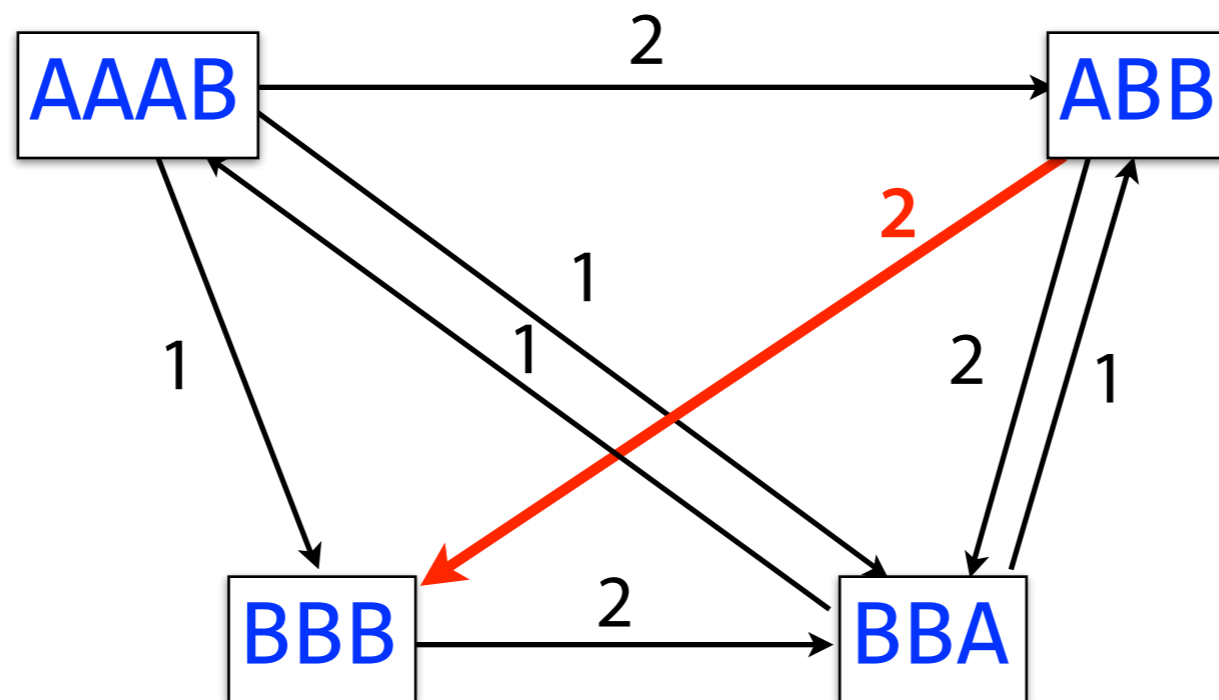
Greedy shortest common superstring



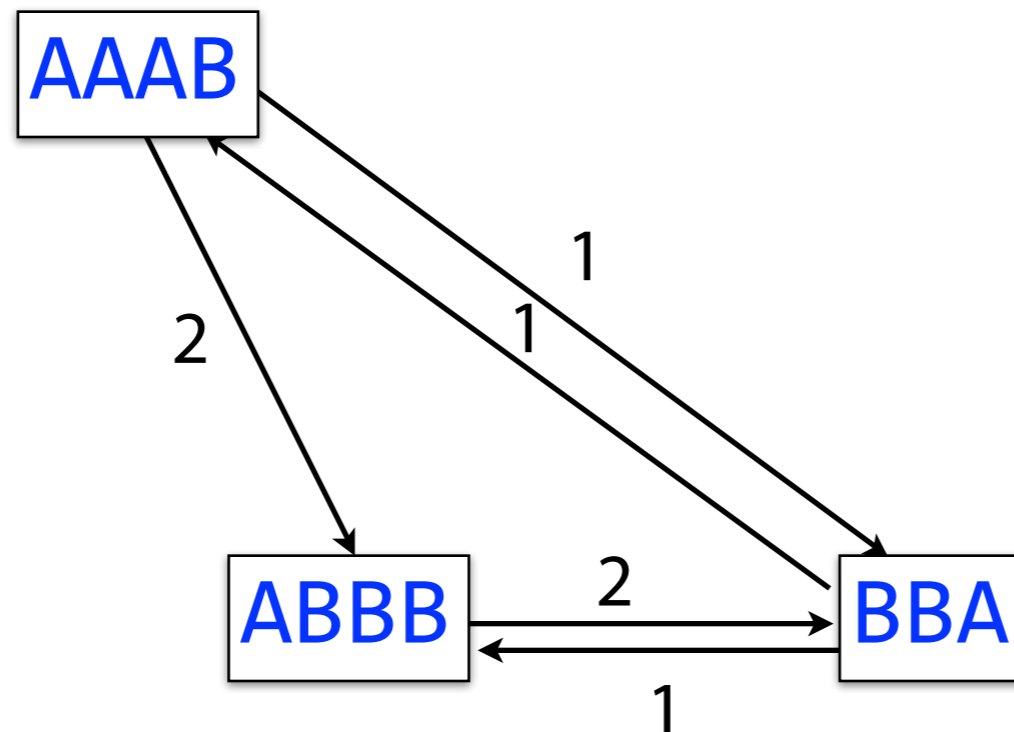
Greedy shortest common superstring



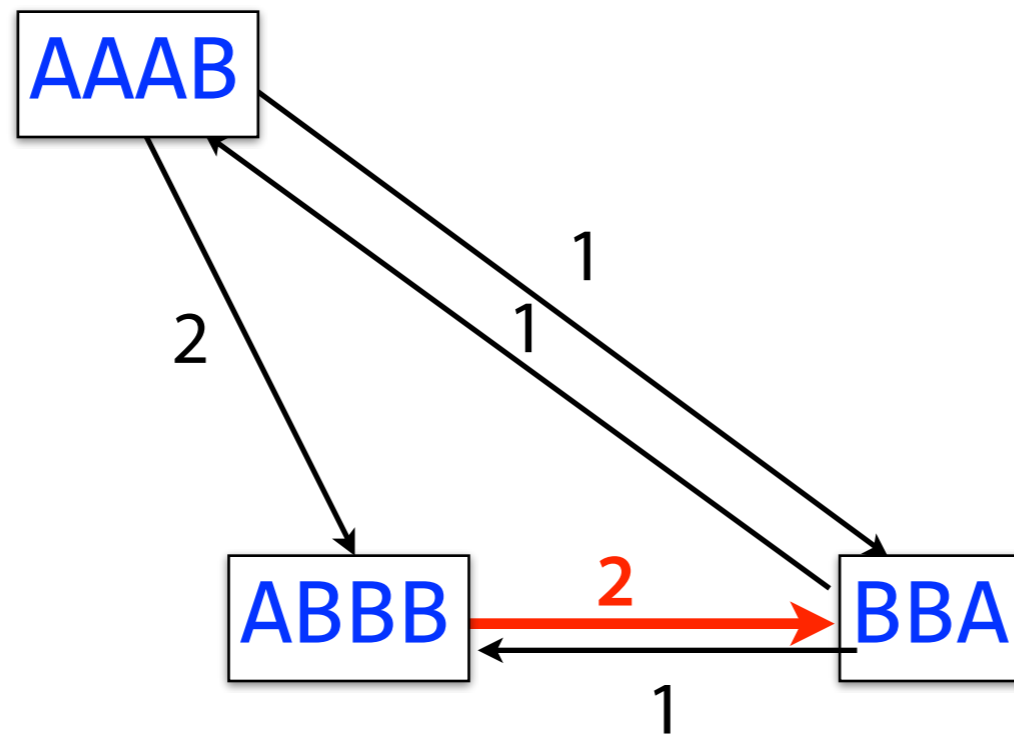
Greedy shortest common superstring



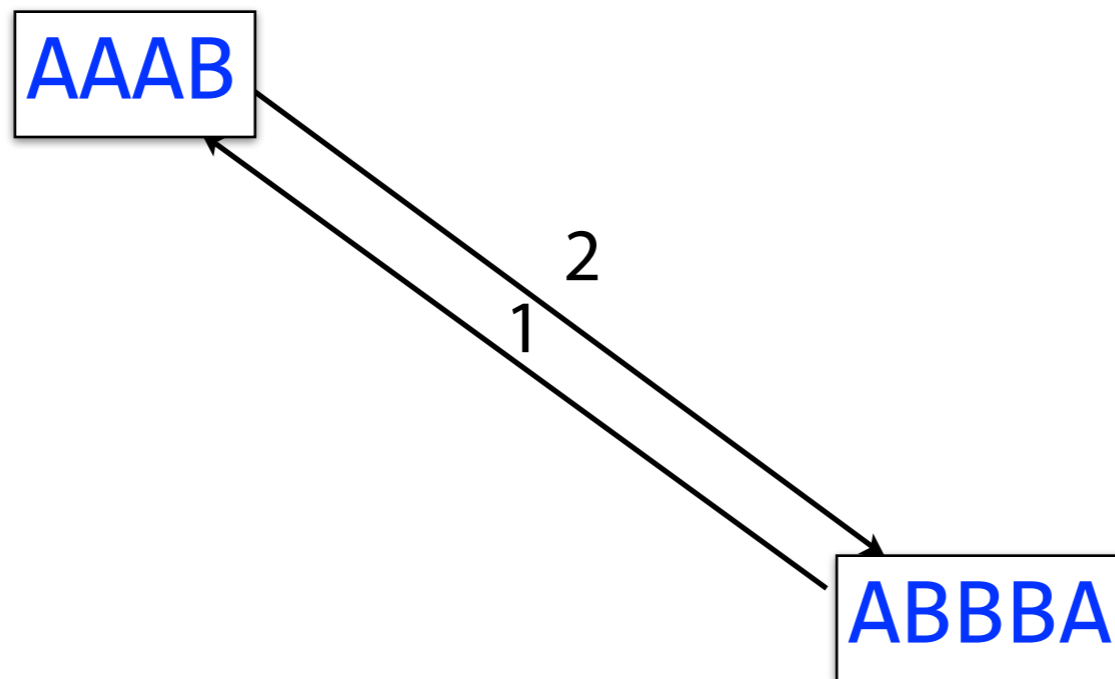
Greedy shortest common superstring



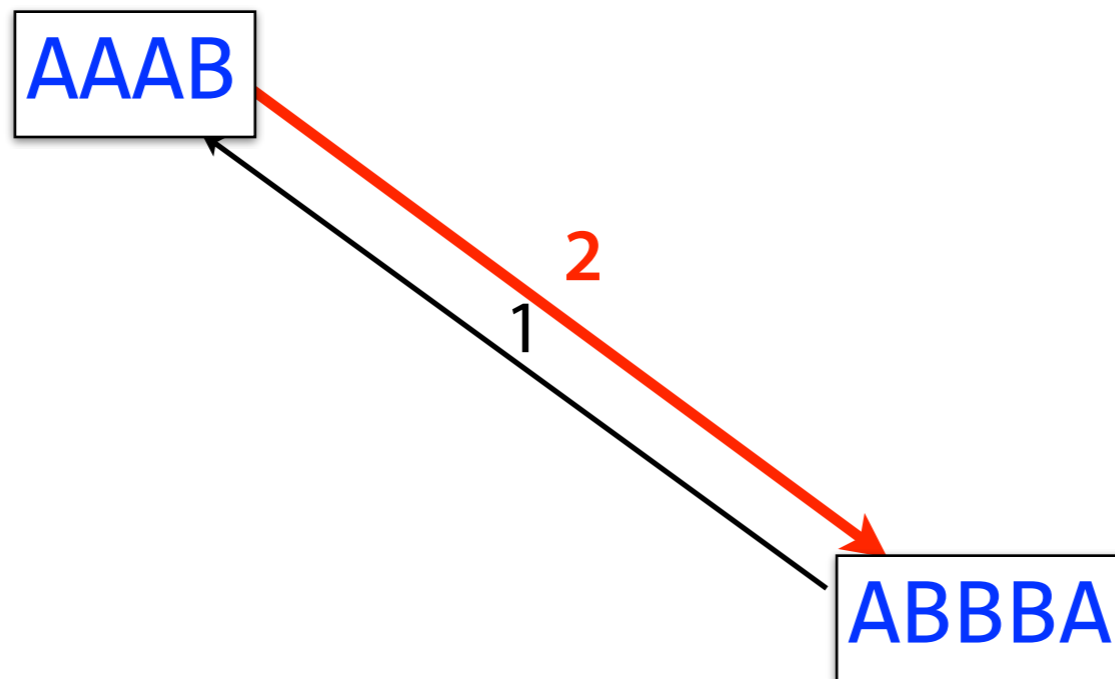
Greedy shortest common superstring



Greedy shortest common superstring



Greedy shortest common superstring



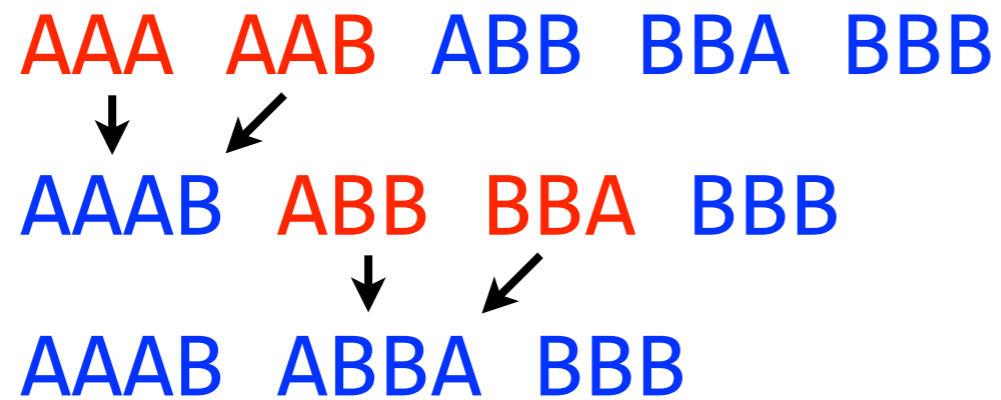
Greedy shortest common superstring

AAABBBA ← superstring, length=7

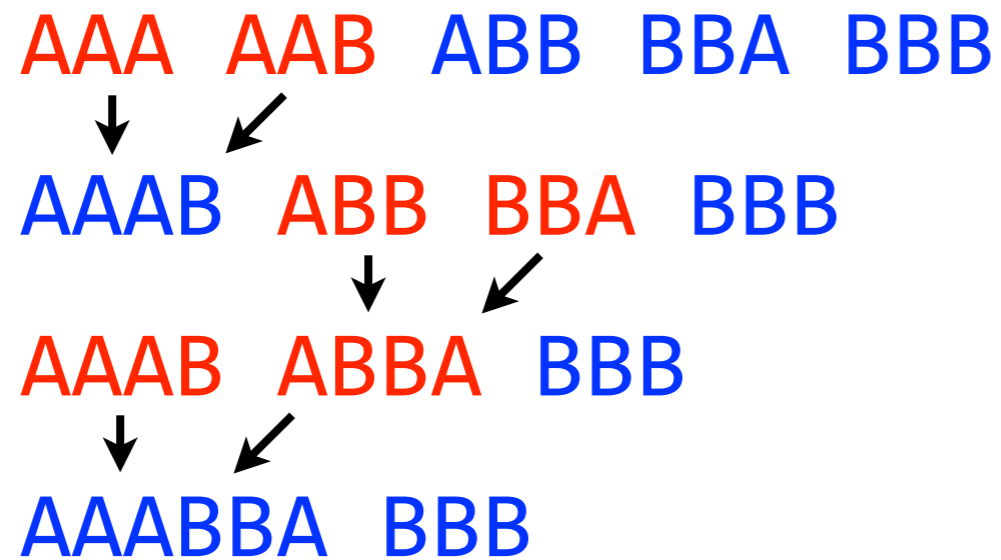
Greedy shortest common superstring

AAA AAB ABB BBA BBB
↓ ↙
AAAB ABB BBA BBB

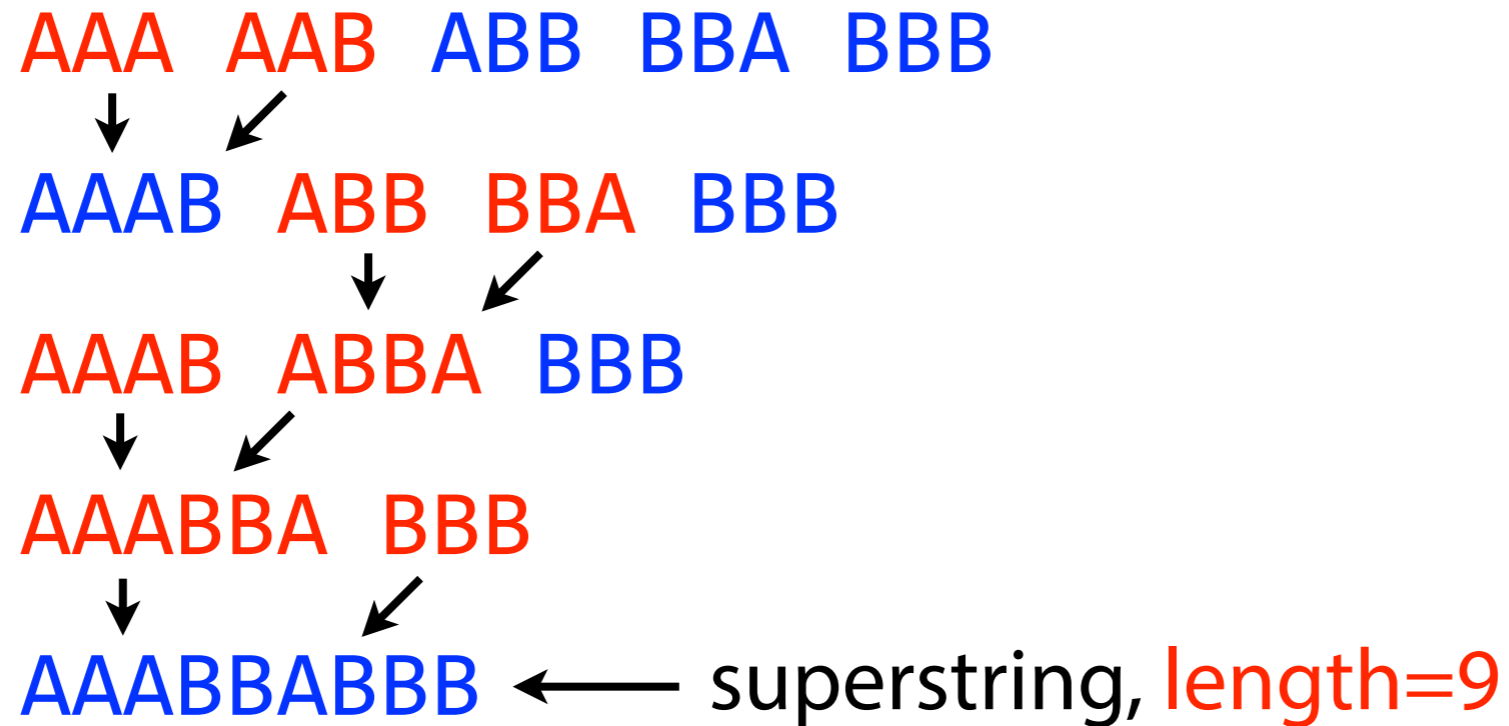
Greedy shortest common superstring



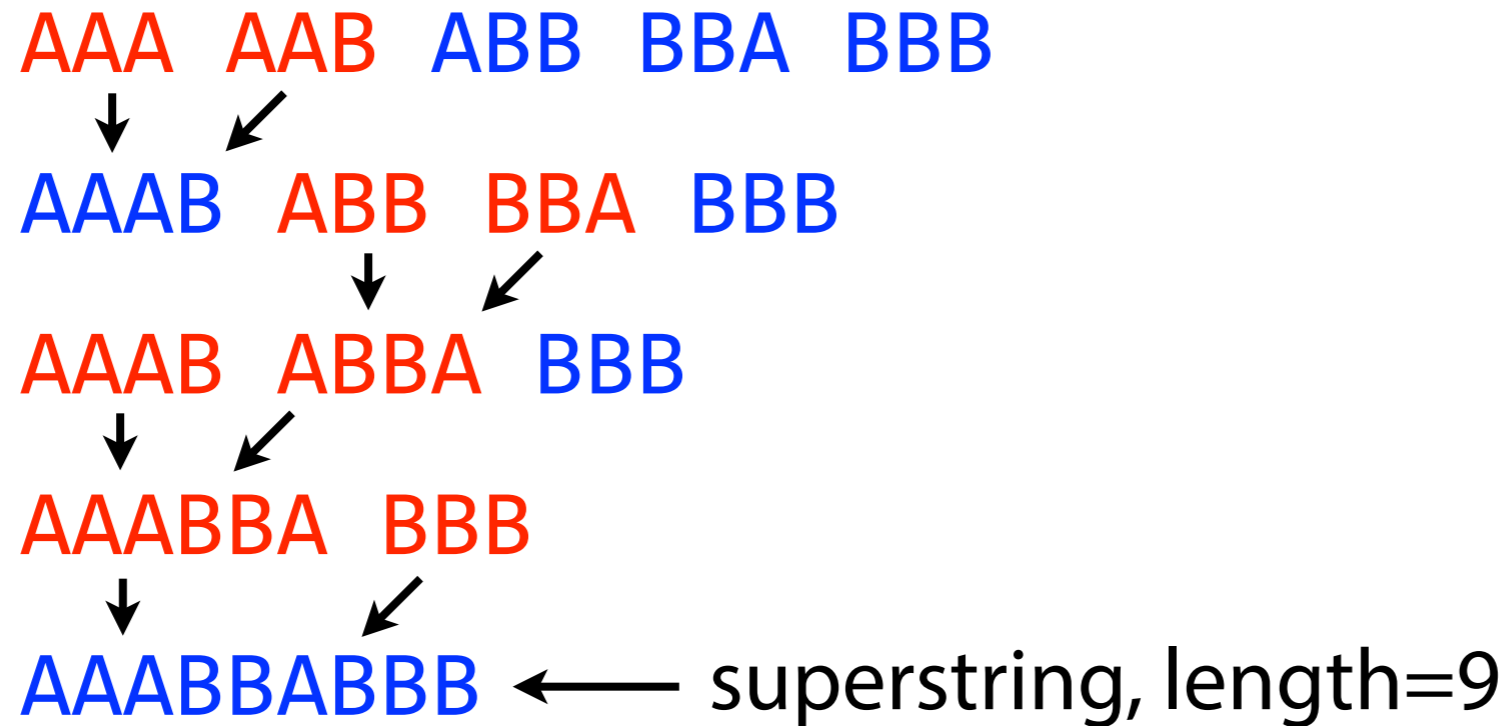
Greedy shortest common superstring



Greedy shortest common superstring

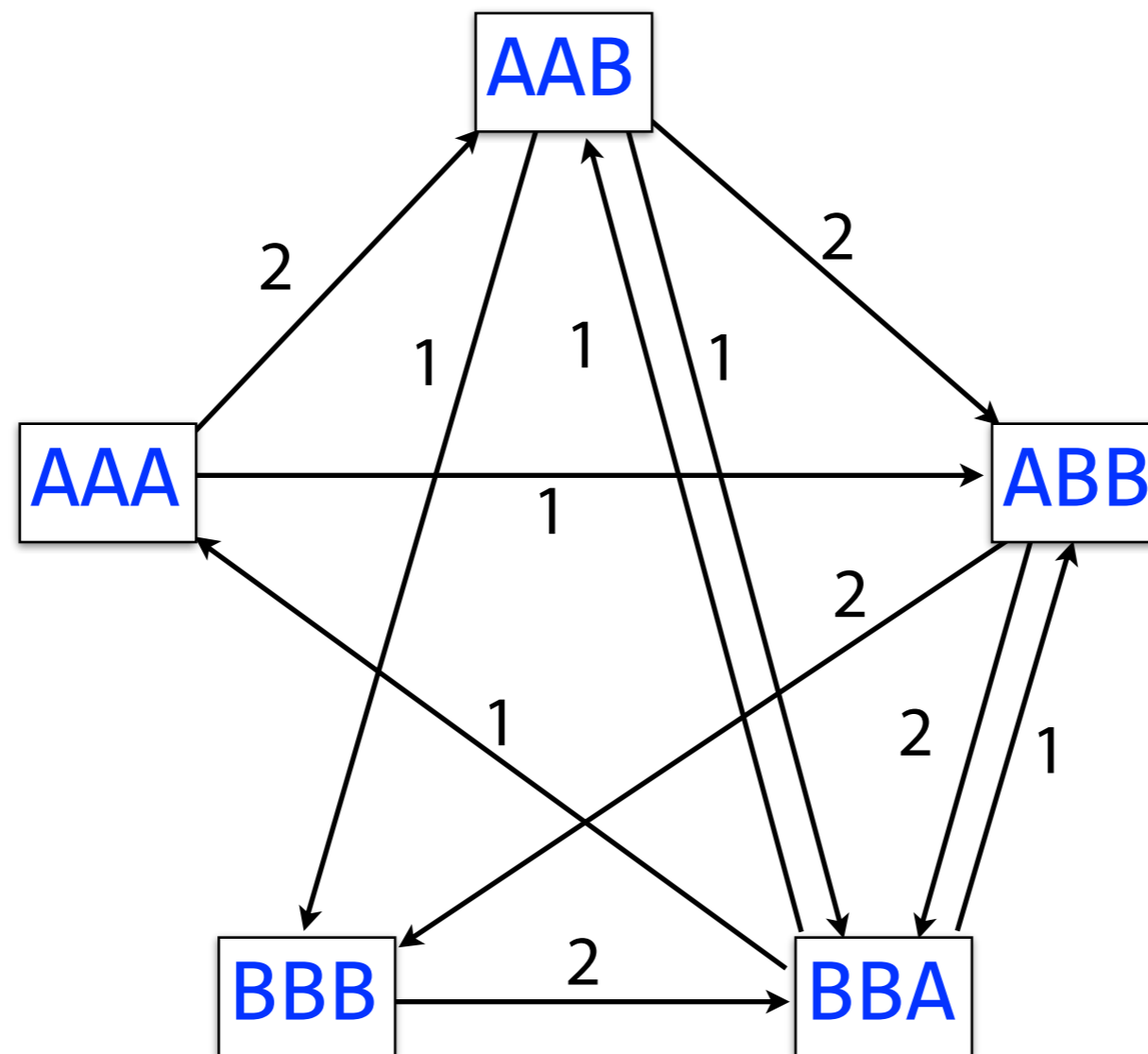


Greedy shortest common superstring

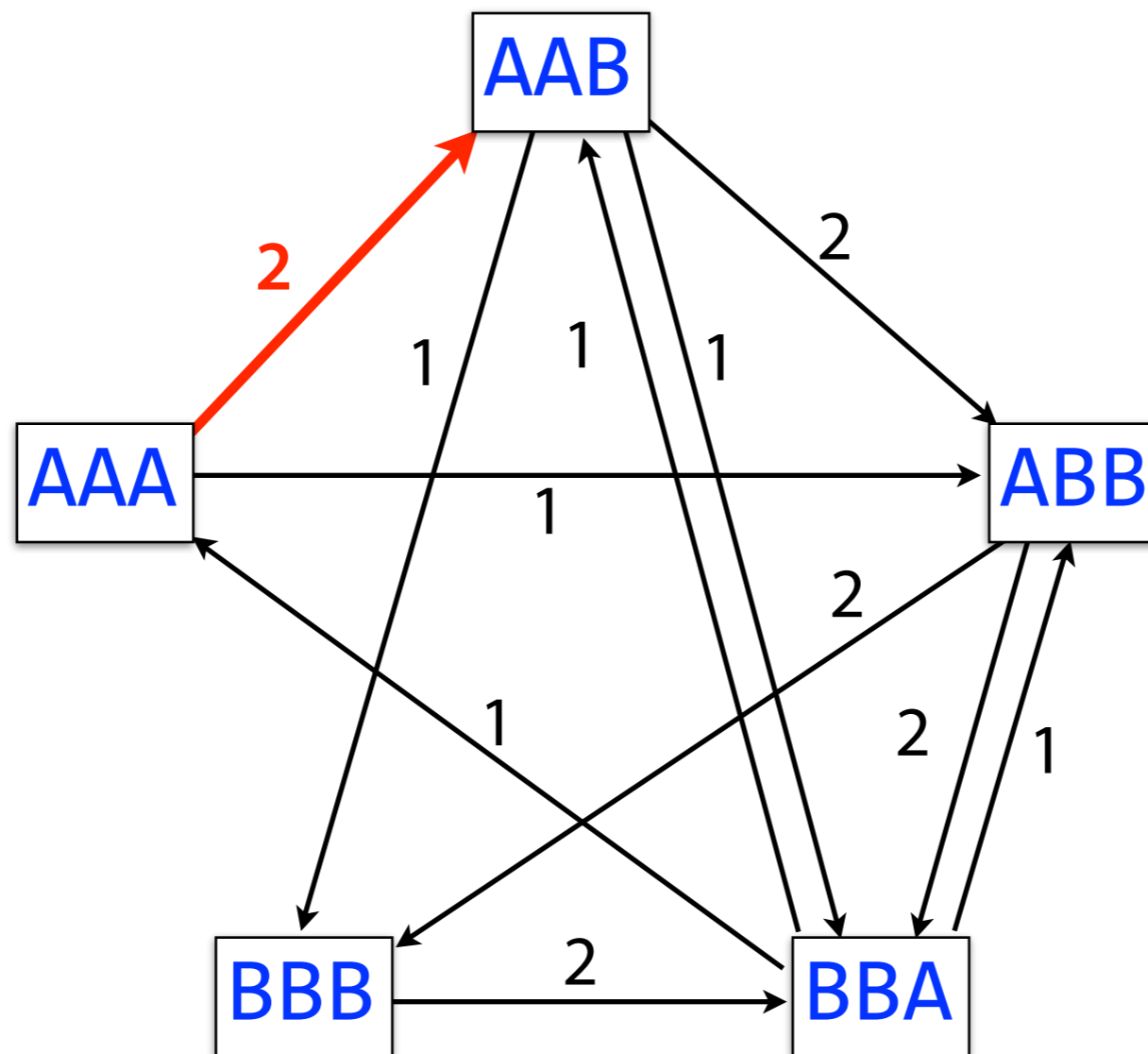


AAABBBA ← superstring, length=7

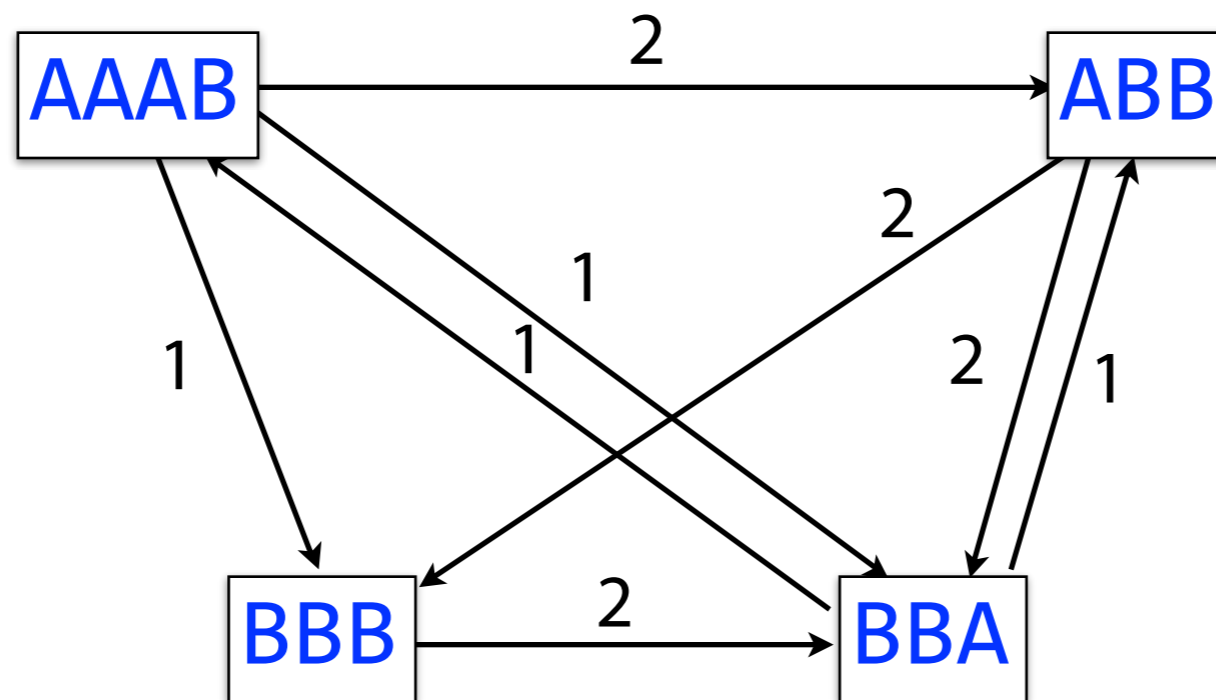
Greedy shortest common superstring



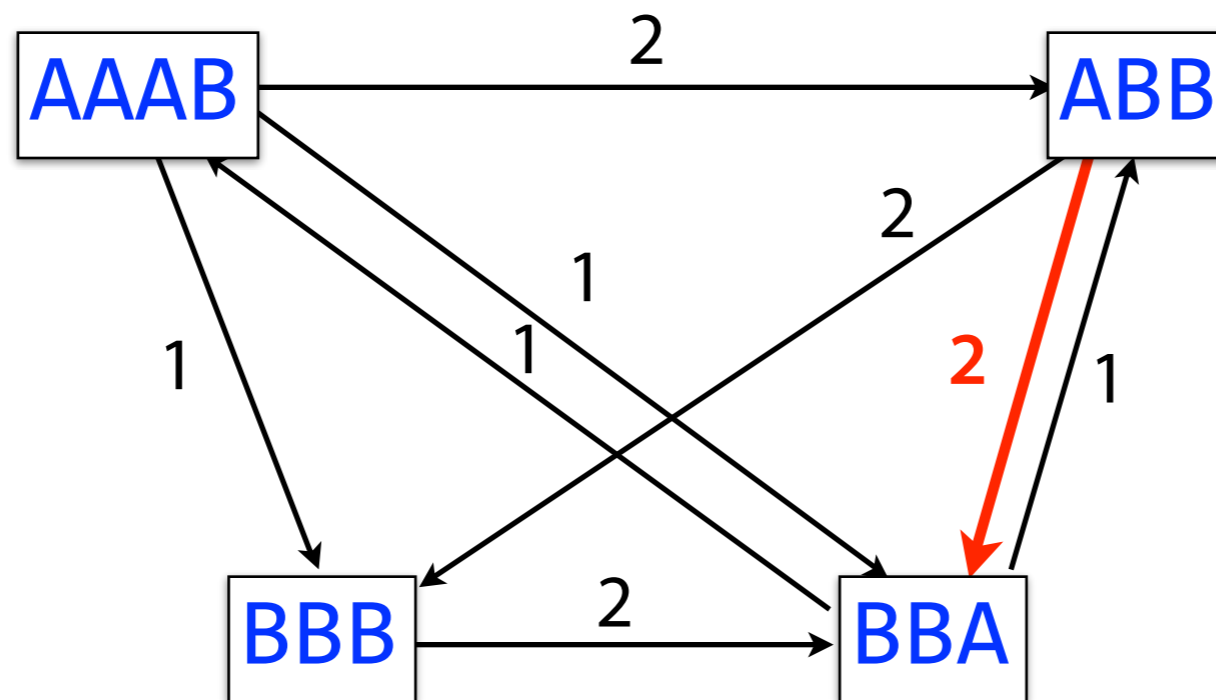
Greedy shortest common superstring



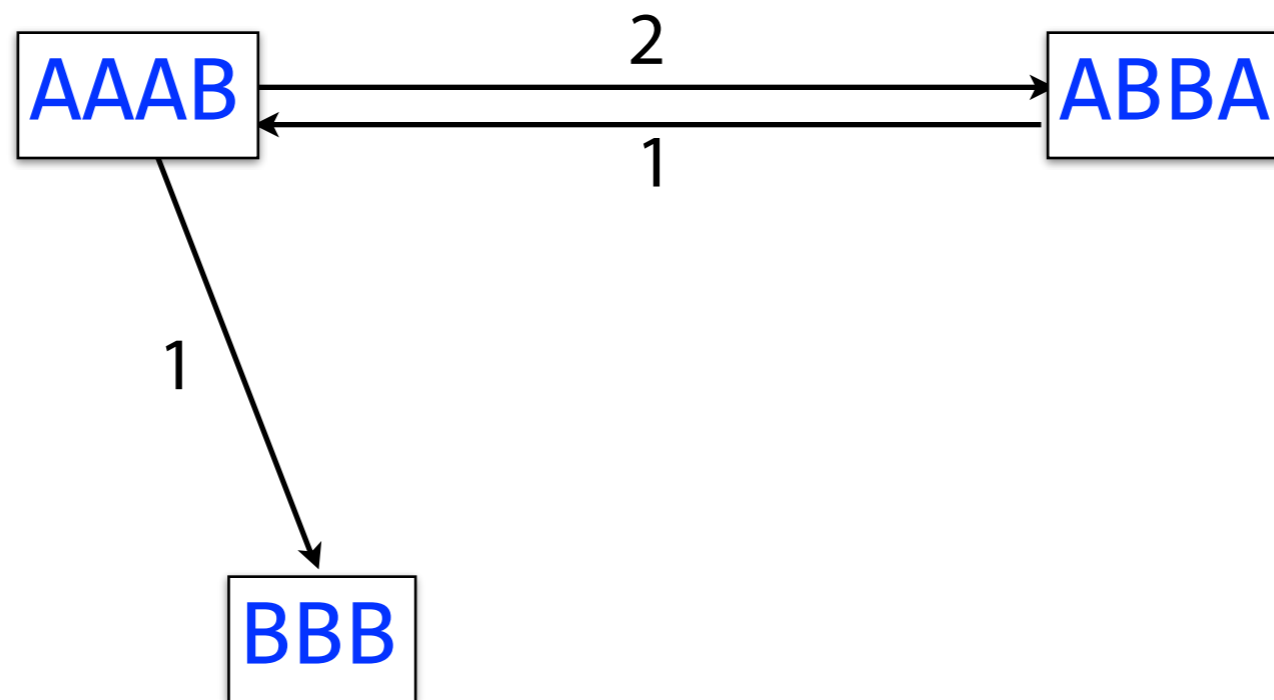
Greedy shortest common superstring



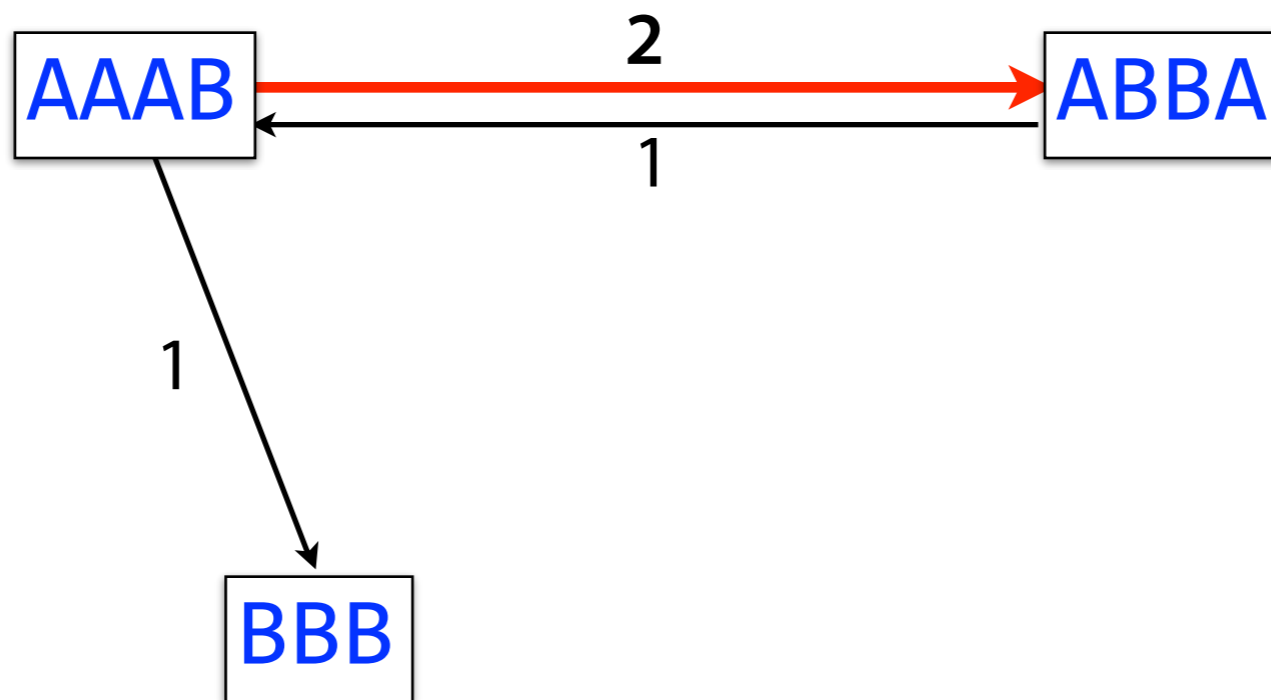
Greedy shortest common superstring



Greedy shortest common superstring



Greedy shortest common superstring



Greedy shortest common superstring

AAABBA

BBB

Greedy shortest common superstring

AAABBABBB ← superstring, length=9