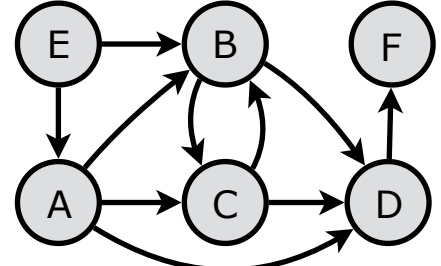


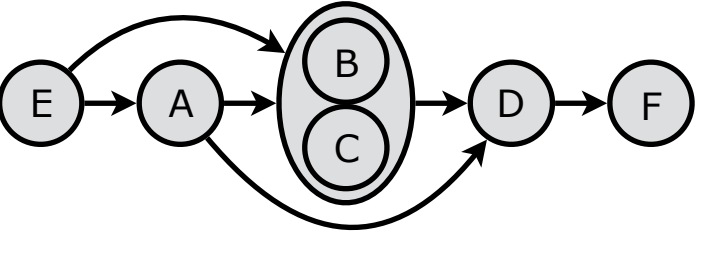
**(a) Sequences**

$S_1$ : A-C-B-D
$S_2$ : E-A-B
$S_3$ : D-F
$S_4$ : A B C D

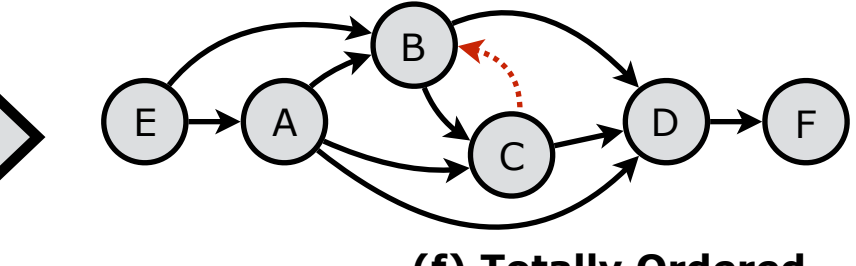
**(b) Sequence Graph**



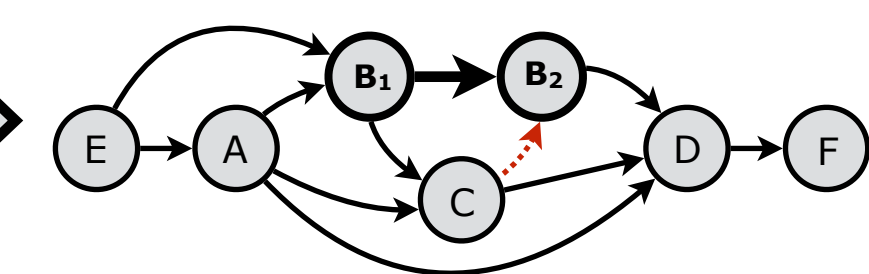
**(c) Topological Ordering of SCCs**



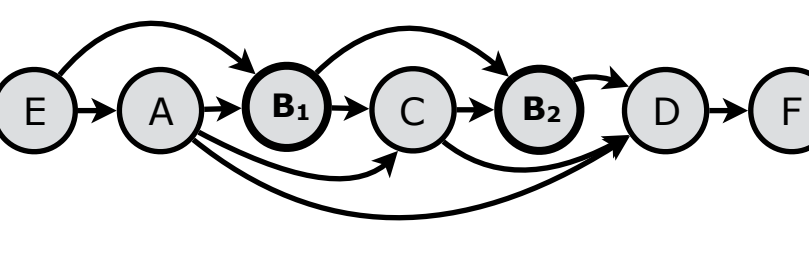
**(d) Order SCCs to Minimize Back Edges**



**(e) Duplicating Attributes to Break SCCs**



**(f) Topological Ordering of Attributes**

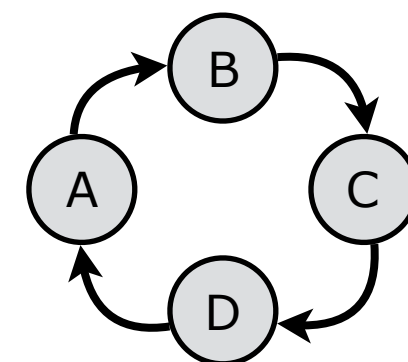


**(f) Totally Ordered Sequences**

$S_1$ : A-C- <b>B<sub>2</sub></b> -D
$S_2$ : E-A- <b>B<sub>1</sub></b>
$S_3$ : D-F
$S_4$ : A- <b>B<sub>1</sub></b> -C-D

**(a) Sequence Graph**

A B
B C
C D
D A



**(d) Conflict Resolution**

**(e) New Sequences**

A C B <sub>2</sub> D
E A B <sub>1</sub>

**(b) Near-Ordering**

