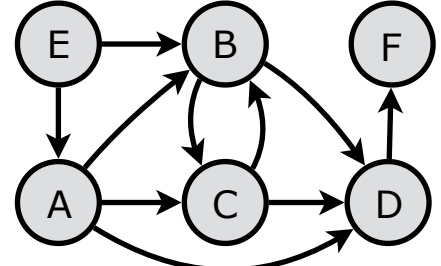


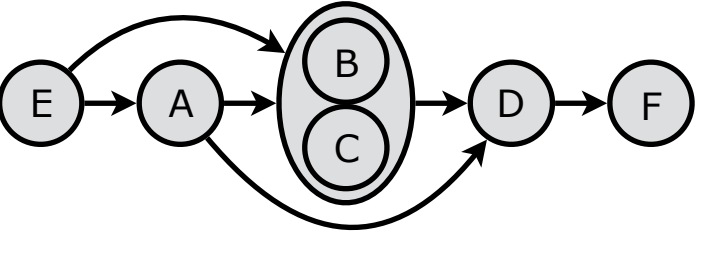
(a) Sequences

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

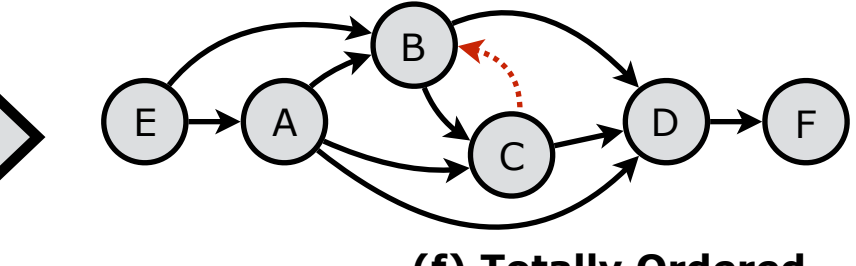
(b) Sequence Graph



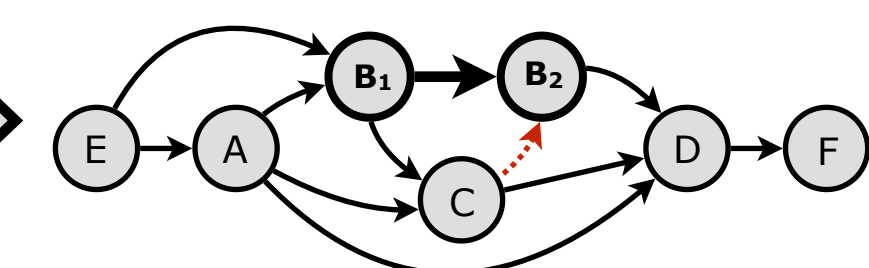
(c) Topological Ordering of SCCs



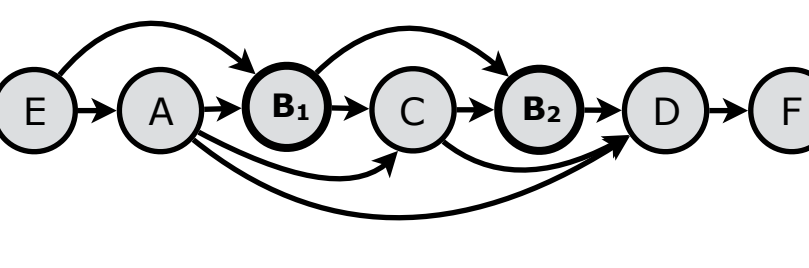
(d) Order SCCs to Minimize Back Edges



(e) Duplicating Attributes to Break SCCs



(f) Topological Ordering of Attributes

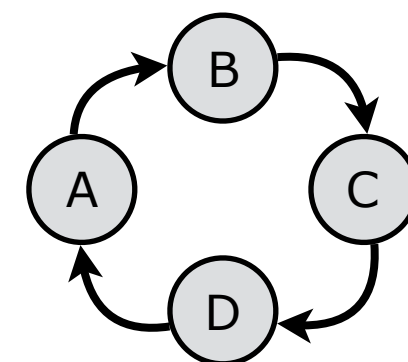


(f) Totally Ordered Sequences

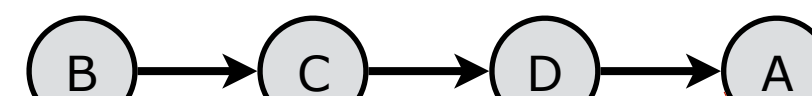
S_1 : A-C- B₂ -D
S_2 : E-A- B₁
S_3 : D-F
S_4 : A- B₁ -C-D

(a) Sequence Graph

A	B
B	C
C	D
D	A



(b) Near-Ordering



(d) Conflict Resolution

(e) New Sequences

A C B ₂ D
E A B ₁