

- Find Candidate keys and prime attributes
- Find the minimal cover
- Decompose to 3NF
- Decompose to BCNF and ensure its lossless join decomposition
- Check if the functional dependencies are preserved.

$A \rightarrow B$

$C \rightarrow B$

$D \rightarrow ABC$

$AC \rightarrow D$

-----2-----

$X \rightarrow W$

$WZ \rightarrow XY$

$Y \rightarrow WXZ$

-----3-----

$V \rightarrow W$

$VW \rightarrow X$

$Y \rightarrow VXZ$

-----4-----

$A \rightarrow BC$

$B \rightarrow C$

$A \rightarrow B$

$AB \rightarrow C$

-----5-----

R (A,B,C)

F: $A \rightarrow B$

$B \rightarrow C$

$C \rightarrow A$

-----6-----

R: (A,B,C,D)

$AB \rightarrow CD$

$D \rightarrow A$