

Consider the schema $S(A, B, C, D, E)$ together with the functional dependencies:

- $BD \rightarrow A$
- $AB \rightarrow C$
- $D \rightarrow A$
- $B \rightarrow C$
- $C \rightarrow E$

1) Is S in 3NF? Why or why not?

2) If S is not in 3NF, decompose into 3NF using the **lossless join decomposition** method.

- 3) If S is not in 3NF, decompose into 3NF using the **synthesis** method.