Database Assignment 3

due: 2:30 pm October 10, 2018

Submit your answers at the beginning of class.

For each set of functional dependencies:

- create a 3NFLJDP decomposition using the algorithm from the text
- using the rules presented in class, determine the highest normal form for your decomposition
- create a BCNFLJ decomposition using the algorithm from the text
- prove or disprove that your BCNFLJ decomposition is dependency preserving

You must show your work!

1. $F = \{ D \rightarrow AB, E \rightarrow C, A \rightarrow D \}$
2. $F = \{ BC \rightarrow ADE, D \rightarrow B \}$
3. $F = \{ D \rightarrow AE, E \rightarrow D, A \rightarrow B, B \rightarrow C \}$
4. $F = \{ D \rightarrow ABCE \}$