CSCI3170 Short Assignment #2  
(Deadline: Nov 6, 2020 23:59)

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Consider the following relation schema and functional dependency:

R(A,B,C)

F = {A 🡪 C, C🡪 A}

1. Find A+, B+, C+, AB+, and BC+

1. List all the candidate keys of the relation.

and

1. Is the relation in BCNF? Briefly explain your answer.

Given , is not a subset of (trivial functional dependence) and is not a superkey of .

Thus, it is not in BCNF.

1. Is the relation in 3NF? Briefly explain your answer

Given the candidate keys in 2., both and are part of some keys for .

Thus, it is in 3NF.