INFOST 410: Chapter 6 Normalization Exercises

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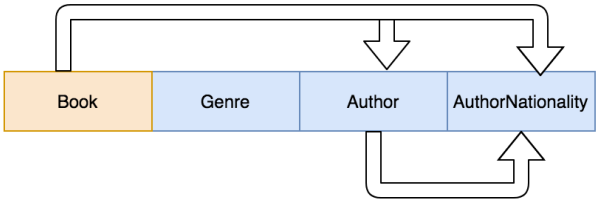
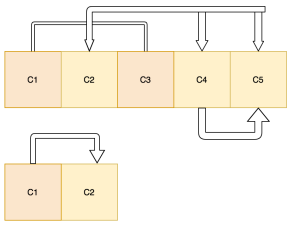
1. A table is considered to be in NF3 when it all key attributes are defined, all attributes are dependent on the primary key, there are no partial dependencies, and there are no transitive dependencies. So for the table shown below to be in NF3 the transitive dependency of author nationality based on author must be removed. One solution for doing this would be to create a new table where the Author in the PK and the AuthorNationality is a nonprime attribute in the new table. Then AuthorNationality is removed from the original table and the Author tribute is converted to a foreign key of the newly formed table.



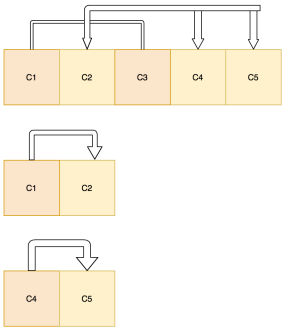
2.

A.
- Full Dependencies (C1, C3) => C2, C4, C5
- Partial Dependencies C1 => C2
- Transitive Dependencies C4 => C5

B.

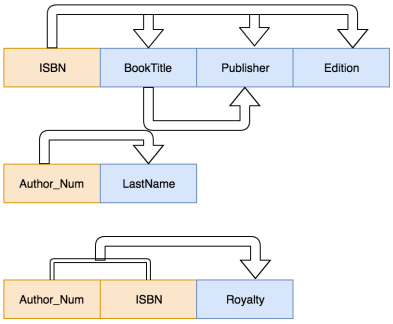


C.



3.

A.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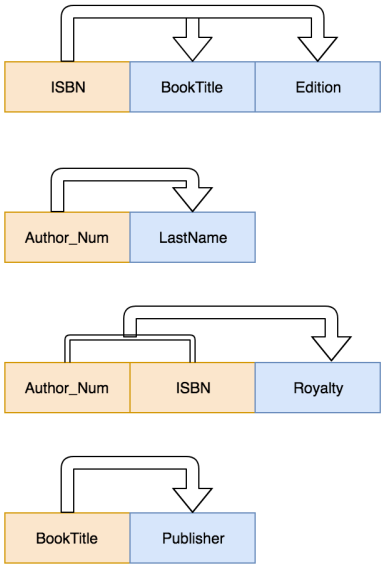
B.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