6. Given the dependency diagram shown in Figure Q6.6, answer Items 6a−6c.

FIGURE
Q6.6
Dependency diagram for Question 6

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a. Identify and discuss each of the indicated dependencies.
   a. C1 and C3 are compound keys, C2 has a partial dependency on c1, c4 and c5 have partial dependencies on c2, c5 depends on c4.
   b. The table is in 1NF, as all arrows above the table in non-key attributes indicate desirable relationships.

b. Create a database whose tables are at least in 2NF, showing the dependency diagrams for each table.

Remaining Transitive dependency: Line_work_type, Line_chg_hour
c. Create a database whose tables are at least in 3NF, showing the dependency diagrams for each table.

No transitive or partial dependencies
FIGURE Q6.7
Book royalty dependency diagram: The dependency diagram in Figure Q6.7 indicates that authors are paid royalties for each book they write for a publisher. The amount of the royalty can vary by author, by book, and by edition of the book.

1) The database is in 1NF, as every data item relies on the key attributes or their pairs in some form.

a. Based on the dependency diagram, create a database whose tables are at least in 2NF, showing the dependency diagram for each table.
Transitive dependency: BookTitle->Publisher

b. Create a database whose tables are at least in 3NF, showing the dependency diagram for each table.