A5

This is a preview of the published version of the quiz

Started: Nov 16 at 10:47am

Quiz Instructions

This test has a time limit of 75 mins.

This test will save and submit automatically when the time expires.

Once started, this test must be completed in one sitting. Do not leave the test before clicking Save and Submit.

Access Code:**A5**

Assignment 5 preview.pdf

premiere.sql

Question 1 — 3 pts

Normalization is

- [ ] the process for evaluating and correcting table structures to minimize data redundancies.
- [ ] the process for evaluating and correcting table structures to reduce the likelihood of data anomalies.
- [ ] the process for evaluating and correcting table structures to eliminate data redundancies.
- [ ] the process for evaluating and correcting table structures to minimize and/or eliminate data integrity problems.

Question 2 — 3 pts

A table in 1NF when

- ○ it includes no partial dependencies and it contains no transitive dependencies.

- ◯ all the key attributes are defined (no repeating groups in the table) , all remaining attributes are dependent on the primary key, and it includes no partial dependencies.
- ◯ all the key attributes are defined (no repeating groups in the table) and when all remaining attributes are dependent on the primary key.
- ◯ very determinant in the table is a candidate key and it contains no multivalued dependencies.

Question 3

3 pts

A table is in 2NF when

- ◯ when it includes no partial dependencies and it contains no transitive dependencies.
- ◯ when all the key attributes are defined (no repeating groups in the table) and when all remaining attributes are dependent on the primary key.
- ◯ when every determinant in the table is a candidate key and it contains no multivalued dependencies
- ◯ all the key attributes are defined (no repeating groups in the table) , all remaining attributes are dependent on the primary key, and it includes no partial dependencies.

Question 4

3 pts

A table is in 3NF when

- ◯ when it includes no partial dependencies and it contains no transitive dependencies.
- ◯ all remaining attributes are dependent on the primary key, and it includes no partial dependencies.
- ◯ all the key attributes are defined (no repeating groups in the table) and when all remaining attributes are dependent on the primary key.
- ◯ every determinant in the table is a candidate key and it contains no multivalued dependencies.

Question 5

3 pts

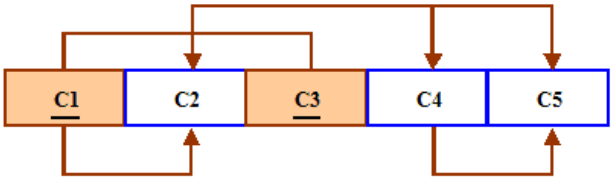
A table is in BCNF when

- ◯ when it includes no partial dependencies and it contains no transitive dependencies.
- ◯ all remaining attributes are dependent on the primary key, and it includes no partial dependencies.
- ◯ all the key attributes are defined (no repeating groups in the table) and when all remaining attributes are dependent on the primary key.
- ◯ every determinant in the table is a candidate key.

Question 6

3 pts

Given the dependency diagram shown below:



- ☐ C4-----> C5 represents a partial dependency
- ☐ C1 -----> C2 represents a partial dependency
- ☐ C1 ----->C2 represents a transitive dependency
- ☐ C4 ----->C5 represents a transitive dependency

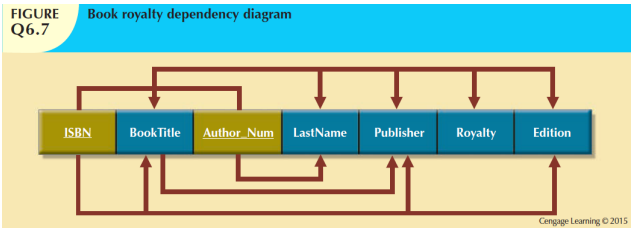
Question 7

20 pts

The dependency diagram in Figure Q6.7 indicates that authors are paid royalties for each book that they write for a publisher. The amount of the royalty can vary by author, by book, and by edition of the book.

Based on the dependency diagram shown in the textbook, create a diagram whose tables are at least in 2NF, showing the dependency diagram for each table.

Please only upload the **PNG**!



Upload Choose a File

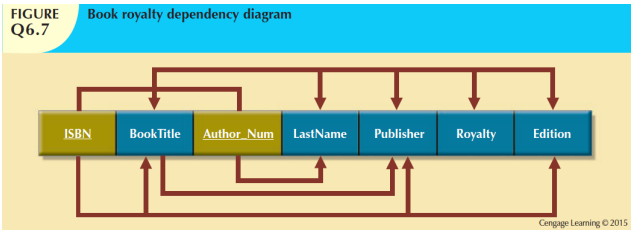
Question 8

20 pts

The dependency diagram in Figure Q6.7 indicates that authors are paid royalties for each book that they write for a publisher. The amount of the royalty can vary by author, by book, and by edition of the book.

Based on the dependency diagram shown in the textbook, create a diagram whose tables are at least in 3NF, showing the dependency diagram for each table.

Please only upload the **PNG**!



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Question 9

3 pts

What is a partial dependency?

- ◯ A partial dependency exists when a nonprime attribute is dependent on another nonprime attribute.
- ◯ A partial dependency exists when a prime attribute is dependent on only a portion of the primary key.
- ◯ A partial dependency exists when a nonprime attribute is dependent on only a portion of the primary key.
- ◯ A partial dependency exists when the value of one attribute is determined by the value of another attribute.

Question 10

3 pts

To remove a transitive dependency, the designer must

- ☐ modify the table so that the determinant in the table that is not a candidate key becomes the component of the primary key.
- ☐ place the attributes that create the transitive dependency in a separate table.
- ☐ create tables that do not contain independent multivalued dependencies.
- ☐ Make sure that the new table's primary key attribute is the foreign key in the original table.

Question 11

3 pts

A surrogate key is

- ☐ an artificial PK introduced by the designer , whose values match the superkey values in the related tables.
- ☐ an artificial PK introduced by the designer with the purpose of simplifying the assignment of primary keys to tables.
- ☐ are usually numeric, they are often automatically generated by the DBMS, and they are free of semantic content (they have no special meaning).

- [ ] an artificial PK which is usually used along with a candidate key.

Question 12

3 pts

Why is a table whose primary key consists of a single attribute automatically in 2NF when it is in 1NF?

- ○ A dependency based on only a part of a composite primary key is called a partial dependency. Therefore, if the PK is a composite attribute, there can be no partial dependencies.
- ○ A dependency based on only a part of a composite primary key is called a partial dependency. Therefore, if the PK is a single attribute, there can be no partial dependencies.
- ○ A dependency based on only a part of a composite primary key is called a partial dependency. Therefore, if the PK is a superkey, there can be no partial dependencies.
- ○ A dependency based on only a part of a composite primary key is called a partial dependency. Therefore, if the PK is also a foreign key, there can be no partial dependencies.

Question 13

6 pts

Use the Premiere database schema to answer the questions below. Attach both query statements (3pts) and query results (3pts)for question 14-19.

List customer first, last names and balances, format dollar amounts to two places, including dollar sign ($), order by balance in descending order.

Edit View Insert Format Tools Table

12pt Paragraph B I U A T²

p

0 words

Question 14

6 pts

List the customer number, last name, first name, and balance of the customer with the smallest balance.

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12pt Paragraph

p

0 words

Question 15

6 pts

Remove all customers from sales rep number 03, and whose credit limit is greater than or equal to $1500.

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12pt Paragraph

p 0 words

Question 16

6 pts

Update part prices with a 10% discount on all parts whose price is greater than or equal to $150.

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12pt Paragraph

p

0 words

Question 17

6 pts

Add three new customers for sales rep 12, in one statement, with the following values:

623, Doe, John, 123 Main St., Tallahassee, FL, 32309, $199,$500

624, Smith, Jane, 586 Boxer Dr., Chipley, FL, 32402, $325,$1200

625, Wilson, Peter, 8528 Elm Blvd., Marianna, FL, 32307, $565,$60

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12pt Paragraph

p

0 words

Question 18

0 pts

(+5pts Extra Credit)

Display all customers' first and last names, streets, cities, states, and zip codes, however, display the query result set as follows (in descending order of zip code):

```
+--------------+-----------------------------+
| name         | address                     |
+--------------+-----------------------------+
| Galvez, Mara | 512 Pine, Ada, MI 49441     |

| Nelson, Mary | 108 Pine, Ada, MI 49441     |

| Adams, Sally | 481 Oak, Lansing, MI 49224  |

| Adams, Sally | 16 Elm, Lansing, MI 49224   |

| Williams, Al | 519 Watson, Grant, MI 49219 |

| Samuels, Ann | 215 Pete, Grant, MI 49219   |

| Martin, Dan  | 419 Chip, Grant, MI 49219   |

| Charles, Don | 48 College, Ira, MI 49034   |

| Dinh, Tran   | 808 Ridge, Harper, MI 48421 |

| Daniels, Tom | 914 Cherry, Kent, MI 48391  |
+--------------+-----------------------------+
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12pt Paragraph

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