

QUIZ 2 - Design and Queries

Due Feb 2 at 8am

Points 50

Questions 22

Available after Jan 28 at 10:05am

Time Limit None

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	729 minutes	16 out of 50 *

* Some questions not yet graded

Score for this quiz: **16** out of 50 *

Submitted Feb 1 at 11:04pm

This attempt took 729 minutes.

Question 1

1 / 1 pts

There are two documents created during the requirements collection and analysis stage. These documents are:

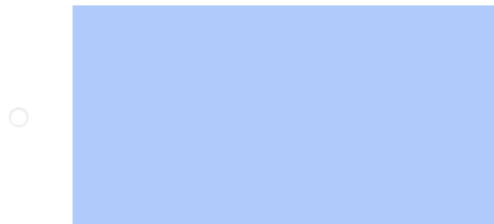
- ☐ Non-disclosure Agreement and Developer Contract
- ☐ Articles of Incorporation and Pre-nuptial Agreement
- ☐ User Manual and Training Guide
- ☒ User Requirements and System Requirements

Correct!

Question 2

1 / 1 pts

Which of the following represents the connection between two tables as a VERB?



Correct!

Question 3

1 / 1 pts

The function of a primary key is to

- ☐ point to a value in another table
- ☒ uniquely identify a row in a table
- ☐ not duplicate any data in a row
- ☐ unlock the secrets of a relation

Correct!

Question 4

1 / 1 pts

Which of the following is not a common fact-finding technique?

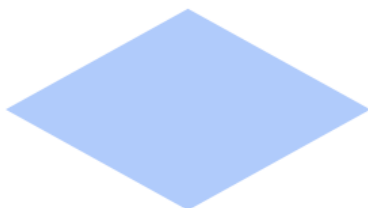
- ☐ Observing work
- ☐ Interviewing
- ☐ Using Questionnaires
- ☒ Proctoring Quizzes

Correct!

Question 5

1 / 1 pts

Which of the following represents a noun (or table) in a conceptual diagram:

☐☒☐

Correct!

Question 6

1 / 1 pts

When a column is defined as AUTO INCREMENT

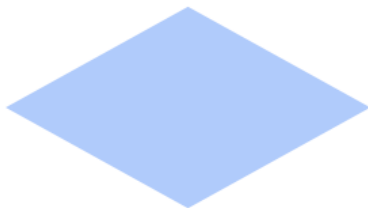
- ☐ you must define that column with a default value of NULL
- ☐ You can't use the column as a primary key
- ☒ a number is generated for each new row inserted into the table
- ☐ you must provide a unique numeric value for that column whenever a row is added to the table

Correct!

Question 7

1 / 1 pts

Which of the following shapes is used in conceptual diagrams to represent an attribute (or adjective)?

☒☐☐

Correct!

Question 8

1 / 1 pts

the formal process of using techniques such as interviews and questionnaires to collect facts about systems, requirements and preferences is known as:

- ☐ detective work
- ☒ fact-finding
- ☐ job searching
- ☐ waterfall method

Correct!

Question 9

Not yet graded / 9 pts

1. Your client is a Food distribution company providing goods to restaurants and stores. They want to be able to keep track of their products, orders made by their customers, and orders coming in from suppliers . The Database needs to be able to answer the following questions:

1. List of customers with orders from a given date range?
2. What suppliers provide which products and what are the prices?
3. What is my net profit of sales to orders?

Other things to keep in mind:

1. How to track current inventory
2. How to track products from can be purchased from multiple suppliers.
3. What if a customer has multiple locations?

Produce the following:

1. Provide a conceptual design telling the "story" of the database. (The conceptual diagram tells a story using nouns, verbs, and adjectives. Also be sure to show the 1-to-many/many-to-many relationships between Relations)

Submit your answer to this question as an image file (draw it out and take a picture, or draw it in a program and save it as an image) or some other format that you can submit an appropriate conceptual diagram (word, PDF, whatever)

 [20160201_215223.jpg](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842142/20160201_215223.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=krzocLzifYghlimP3smcoEnfxTc%3D) ([https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842142/20160201_215223.jpg?](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842142/20160201_215223.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=krzocLzifYghlimP3smcoEnfxTc%3D)
[AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=krzocLzifYghlimP3smcoEnfxTc%3D](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842142/20160201_215223.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=krzocLzifYghlimP3smcoEnfxTc%3D))

Question 10

Not yet graded / 9 pts

Turn the story map into a Physical (ERD) diagram representing table structure. Identify keys and data types.

Submit your answer to this question as an image file (draw it out and take a picture, or draw it in a program and save it as an image) or some other format that you can submit an appropriate ERD/physical diagram (word, PDF, whatever)

 [20160201_223259.jpg](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842154/20160201_223259.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=RxwrMqaqLR3TextQnP85fbJgZsA%3D) ([https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842154/20160201_223259.jpg?](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842154/20160201_223259.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=RxwrMqaqLR3TextQnP85fbJgZsA%3D)
[AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=RxwrMqaqLR3TextQnP85fbJgZsA%3D](https://instructure-uploads.s3.amazonaws.com/account_100000000083919/attachments/34842154/20160201_223259.jpg?AWSAccessKeyId=AKIAJFNFXH2V2O7RPCAA&Expires=1454400284&Signature=RxwrMqaqLR3TextQnP85fbJgZsA%3D))

Question 11

1 / 1 pts

You don't ever have to code a RIGHT JOIN because

- ☐ left joins are just as efficient
- ☒ right outer joins can be converted into a left join
- ☐ right outer joins are less efficient
- ☐ left outer joins are easier to code

Correct!

Question 12

1 / 1 pts

Which of the following aggregate functions will add together all the values of a given field?

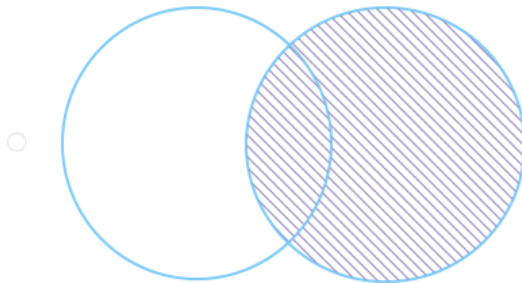
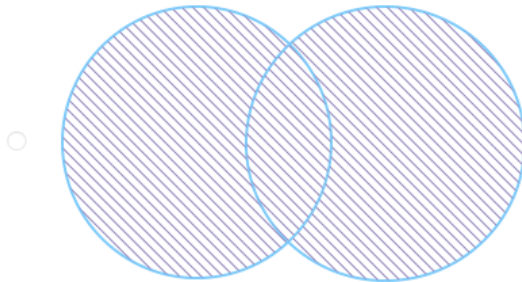
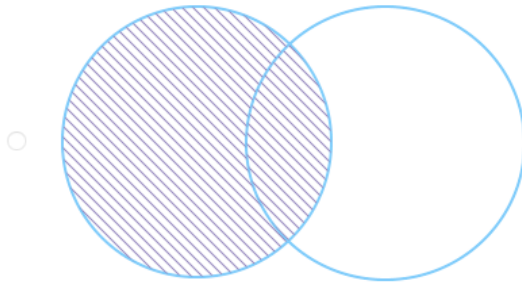
- ☐ AVG(field_name)

Correct!

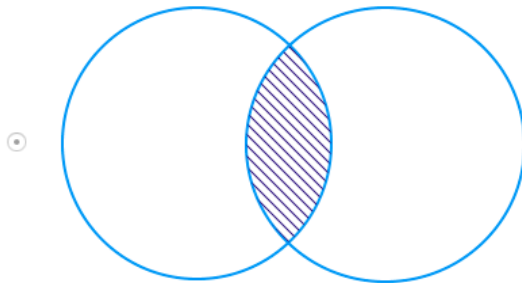
☐ LEFT(field_name, 2)☒ SUM(field_name)☐ COUNT(field_name)**Question 13**

1 / 1 pts

Which of the following Venn Diagrams represents an INNER JOIN?

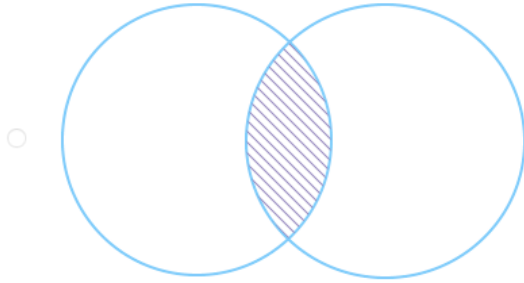
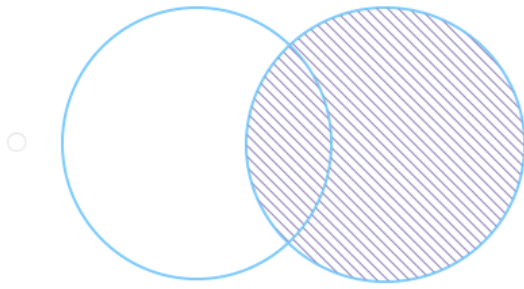


Correct!

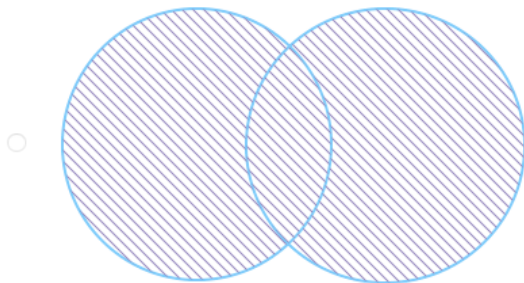
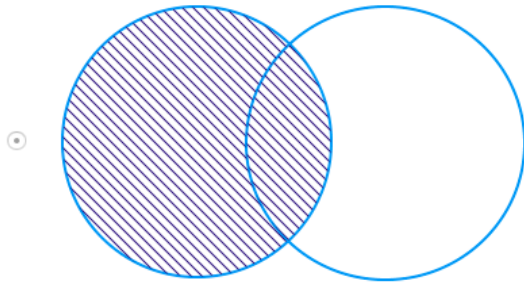
**Question 14**

1 / 1 pts

Which of the following Venn Diagrams represents a LEFT JOIN?



Correct!

**Question 15**

1 / 1 pts

When you code a SELECT statement, you must code the four (4) main clauses in the following order

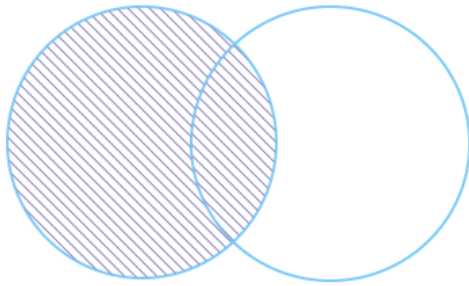
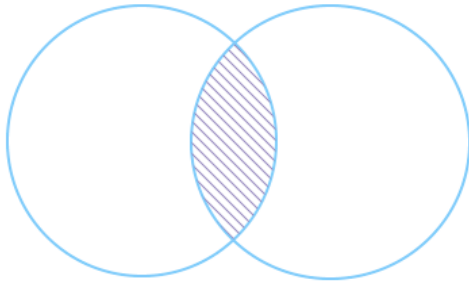
- ☐ SELECT, WHERE, FROM, ORDER BY
- ☐ FROM, WHERE, SELECT, ORDER BY
- ☐ SELECT, FROM, ORDER BY, WHERE
- ☒ SELECT, FROM, WHERE, ORDER BY

Correct!

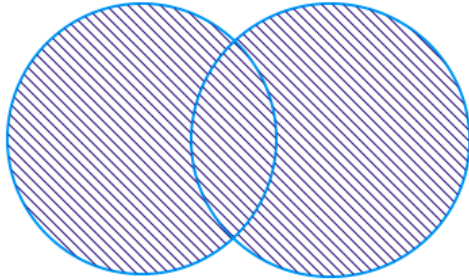
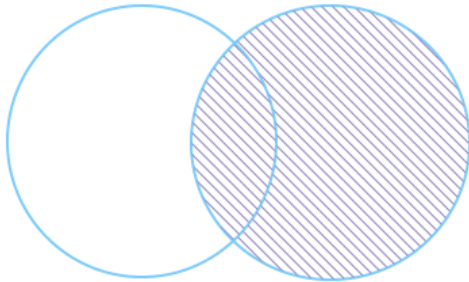
Question 16

1 / 1 pts

Which of the following Venn diagrams represents a CROSS JOIN (Cartesian product)?

☐☐

Correct!

☒☐

Question 17

1 / 1 pts

Expressions coded in the WHERE clause

- ☐ must refer to columns in the SELECT clause
- ☐ can use aggregate search conditions but can't use non-aggregate search conditions
- ☒ can use non-aggregate search conditions but can't use aggregate search conditions
- ☐ can use either aggregate search conditions OR non-aggregate search conditions

Correct!

Question 18

1 / 1 pts

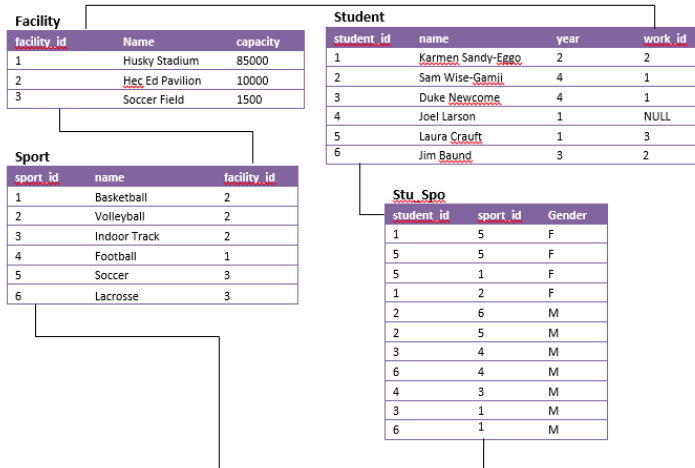
Which of the statements below best describes the result set returned by this SELECT statement?

```
SELECT VendorState, COUNT(*) AS Column2
FROM Vendors
GROUP BY VendorState
HAVING COUNT(*) > 1;
```

- ☐ the duplicate vendors from each state
- ☐ the number of vendors in each state
- ☐ The names of vendors in each state
- ☒ The number of vendors in each state having more than one vendor

Correct!

Use the ERD database diagram shown here to write queries for the next few questions. Be sure to include CODE and RESULTS for each question.



Question 19

Not yet graded / 4 pts

Insert the CODE and RESULTS for the query that solves the following:

Who plays only one sport?

Paste the code from your query and use a table to fill in the results, be sure to include column headers.

Your Answer:

CODE

```
SELECT Student.name, COUNT(Stu_Spo.student_id) as count
FROM Student JOIN Stu_Spo
ON Student.student_id = Stu_Spo.student_id
GROUP BY Student.name
HAVING count = 1;
```

RESULT

Student.name	count
Joel Larson	1

Question 20

Not yet graded / 4 pts

Insert the CODE and RESULT SET for the query that solves the following:

What facilities does each senior play in?

Paste the code from your query and use a table to fill in the results, be sure to include column headers.

Your Answer:

CODE

```
SELECT Facility.Name, Student.name
FROM Facility JOIN Student
ON Facility.facility_id = Student.work_id
WHERE Student.year = 4;
```

RESULT

Facility.Name	Student.name
Husky Stadium	Sam Wise-Gamji
Husky Stadium	Duke Newcome

Question 21

Not yet graded / 4 pts

Insert the CODE and RESULT SET for the query that solves the following:

Who are the employees of each facility?

Paste the code from your query and use a table to fill in the results, be sure to include column headers.

Your Answer:

CODE

```
SELECT Facility.Name, Student.name
FROM Facility JOIN Student
ON facility_id = work_id
WHERE work_id IS NOT NULL
```

RESULT

Facility.Name	Student.name
Husky Stadium	Sam Wise-Gamji
Husky Stadium	Duke Newcome
Hec Ed Pavilion	Karmen Sandy-Eggo
Hec Ed Pavilion	Jim Baund
Soccer Field	Laura Crauft

Question 22

Not yet graded / 4 pts

Insert the CODE and RESULT SET for the query that solves the following:

Which students work and play in the same facility?

Paste the code from your query and use a table to fill in the results, be sure to include column headers.

Your Answer:

```
SELECT Student.name
FROM Student JOIN Stu_Spo
```

```
ON Student.student_id = Stu_Spo.student_id
JOIN Sport
ON Student.work_id = Sport.facility_id
WHERE Student.work_id = Sport.facility_id AND Stu_Spo.sport_id = Sport.sport_id
```

RESULT**Student.name**

Karmen Sandy-Eggo

Duke Newcome

Laura Crauft

Jim Baund

Quiz Score: **16** out of 50