

In-class Exercise 4 - Summer 2022

Due Aug 2 at 11:59pm **Points** 30 **Questions** 30
Available until Aug 2 at 11:59pm **Time Limit** 90 Minutes

This quiz was locked Aug 2 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	59 minutes	25 out of 30

Score for this quiz: **25** out of 30

Submitted Aug 2 at 12:29pm

This attempt took 59 minutes.

Question 1

1 / 1 pts

True/False : In SQL, it is possible to have two rows that are completely identical in all their columns existing in the same table.

Correct!

☒ True

☐ False

Question 2

1 / 1 pts

What happens if NULLs exist in the grouping attribute of the query?

Correct!

Separate group created for all tuples with a NULL value in grouping attribute



Database returns error.



All such tuples will be ignored and will not affect the query result

Question 3**1 / 1 pts**

Which of the following SQL keywords is **not** used to modify the **rows** of a given table?



Update



Delete



Insert



Alter

Correct!**Question 4****1 / 1 pts**

Which of the following keywords do **NOT** prevent the corresponding attributes marked with them from having duplicate values in the table?



None of them



Not Null



Primary Key

Correct!

☐ Unique

Question 5

1 / 1 pts

True/False: Once a table has been defined, there is no way to add a column to or remove a column from it.

☐ True

☒ False

Correct!

Question 6

1 / 1 pts

True/False: Once a table has been defined, there is no way to add or remove a constraint from it.

☐ True

☒ False

Correct!

Question 7

1 / 1 pts

Which of the following types of join is equivalent to the cross product if the join condition is set to be always true?

☐ Right Outer Join

☐ Inner Join

Correct!

- ☒ All of them is.
- ☐ Left Outer Join

Question 8**1 / 1 pts**

By default, the order by clause lists items in what order?

- ☐ Random
- ☐ There is no default; Either ASC or DEC must be specified.
- ☐ Descending
- ☒ Ascending

Correct!**Question 9****1 / 1 pts**

To remove a table from an SQL database, we use the _____ command.

- ☐ Kill Table
- ☒ Drop Table
- ☐ Remove Table
- ☐ Delete Table

Correct!**Question 10****1 / 1 pts**

An attribute A of type Char(20) is assigned the value "12345678". How much space in bytes does attribute A occupy in memory?

Correct!

☐ 16

☒ 20

☐ 8

☐ 12

Question 11

1 / 1 pts

Which of the following is not a keyword for set operations?

Correct!

☐ Intersect

☒ Between

☐ Union

☐ Except

Question 12

1 / 1 pts

SELECT statement is used for retrieving information from a database.

Correct!

☒ True

☐ False

Question 13**1 / 1 pts**

SQL function UNIQUE(Q) returns TRUE if there are no duplicate tuples in the result of query Q.

Correct!☒ True☐ False**Question 14****0 / 1 pts**

Consider the natural join of a table R with a table S. If R has m tuples and S has n tuples. Then the maximum and minimum size of the resulting table respectively are:

☐ $m+n$ and $m-n$ ☐ $m*n$ and 0☐ $m*n$ and $m+n$ **Correct Answer****You Answered**☒ $m+n$ and 0**Question 15****0 / 1 pts**

Given the following two tables:

A		B	
W1	W2	Q1	Q2
0	1	1	0
1	2	1	0
3	4	4	0

How many rows will be in the result of the following query?

Select *

From A Left Outer Join B on A.W1 = B.Q1

You Answered

☒ 2

☐ 1

☐ 3

Correct Answer

☐ 4

Question 16

0 / 1 pts

Given the following two SQL queries:

1.

Select Distinct Name

From Some_table

2.

(Select Name

From Some_table)

Union

(Select Name

From Some_table)

Assuming Some_table is not empty, which of the following statement is correct?

☐ Second query is invalid

☒ Can't not tell. It depends.

☐ They always produce the same result.

☐ They always produce different results.

ou Answered

orrect Answer

Question 17

1 / 1 pts

Given the following **schema of table A**

A (Q1 int not NULL,

Q2 int,

Primary key(Q1),

Foreign Key (Q2) References B(W2))

and the following **table B** in the database:

W1 W2

1 1

3 3

5 5

Which of the following is a valid tuple for table A?

Correct!☐ 2, 2☐ null, 1☒ 3, 5☐ '2', 1**Question 18****1 / 1 pts**

Use the Following tables to rest of the questions.

Empty Cells Indicates NULL value.

Workers

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DE
001	Monika	Arora	100000	2014-02-20 09:00:00	HF
002	Mike	Jones	80000	2014-06-11 09:00:00	Ad
003	George	Harris	300000	2014-02-20 09:00:00	HF
004	Sarah	Robinson	500000	2014-02-20 09:00:00	Ad
005	Josh	Johnson	450000	2014-06-11 09:00:00	Ad
006	Elise	Müller	200000	2014-06-11 09:00:00	Ac
007	Albert	Ziegfeld	75000	2014-01-20 09:00:00	Ac
008	Lukas	Wagner	100000	2014-04-11 09:00:00	Ad

Bonus

WORKER_ID BONUS_DATE BONUS_AMOUNT

1	2016-02-20 00:00:00	5000
2	2016-06-11 00:00:00	3000
3	2016-02-20 00:00:00	4000
1	2016-02-20 00:00:00	4500
2	2016-06-11 00:00:00	3500

Contact

WORKER_ID CELL_PHONE HOME_PHONE

1	111-11111111	111-11111110
2	222-22222222	
3	333-33333333	333-33333330
4	444-44444444	
5	555-55555555	555-55555550

Title

WORKER_ID WORKER_TITLE AFFECTED_FROM

1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

Which of the followings should be fill into the blanks of the query below to find the worker with the **lowest** salary?

Select *

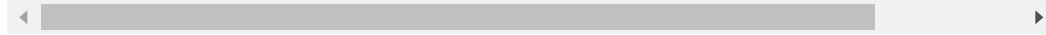
From Workers

Where Salary ____ ____ (

Select Salary

From Workers

)



☐ >= ALL

☐ >= ANY

☒ <= ALL

☐ <= ANY

Correct!

Question 19

1 / 1 pts

Which of the options should be filled in the following query to find out all combination of two different workers whose salaries adds up to exactly 200,000?

Select *

From Workers as W1 inner Join Workers As W2 on _____

Where W1.Salary + W2.Salary = 200000

☒ W1.WORKER_ID <> W2.WORKER_ID

☐ W1.WORKER_ID == W2.WORKER_ID

☐ W1.Salary == W2.Salary

☐ W1.Salary <> W2.Salary

Correct!

Question 20**1 / 1 pts**

Which of the following SQL is correct to display all the Workers who got salary in the range of 100,000 to 300,000?

☐ SELECT * FROM Workers WHERE Salary IN (100000, 300000)

☐ SELECT * FROM Workers WHERE Salary NOT IN (100000, 300000)

☒ SELECT * FROM Workers WHERE Salary BETWEEN 100000 AND 300000

☐ SELECT * FROM Workers WHERE Salary NOT BETWEEN 100000 AND 300000

Correct!**Question 21****1 / 1 pts**

In order to construct a query that finds out the departments that have more than 3 people, which of the follow key word is **NOT** necessary?

☐ Select

☐ From

☒ Where

☐ Having

Correct!

Question 22**1 / 1 pts**

Which of the followings should be inserted into the blank for the query to find the IDs of all people whose last name is both **at least** 6 characters long and ends with 'son'?

Select ID

From Workers

Where LAST_NAME Like _____

Correct!☒ %____son☐ %%%son☐ ____son☐ %_%son**Question 23****0 / 1 pts**

Given the following query:

Select *

From Bonus as B1 Inner Join Bonus as B2

On B1.WORKER_ID= B2.WORKER_ID

How many rows will there be in the result of the query?

You Answered

☐ 8☒ 4☐ 5

Correct Answer

☐ 9

Question 24

1 / 1 pts

Which of the followings should be inserted into the **blank A** for the query to find the first names of all workers who has received bonus at least twice?

Select FIRST_NAME

From Workers

Where Workers.WORKER_ID ____A____

(

Select Bonus.WORKER_ID

From Bonus

Group By Bonus.WORKER_ID

Having ____B____ (Bonus.WORKER_ID) >

1

)

☐ Exists☐ Not Exists

Correct!☐ Not In☒ In**Question 25****1 / 1 pts**

Which of the following should be inserted into **blank B**?

☐ SUM☒ COUNT☐ AVG☐ MAX**Correct!****Question 26****0 / 1 pts**

How many rows will there be in the result of the following query?

Select *

From Contact

Where HOME_PHONE = NULL

Correct Answer☐ 0☐ 3**You Answered**☒ 2

☐ 1

Question 27

1 / 1 pts

Which of the followings should be inserted into the blank for the query to increase the salary of all workers by 10%?

Update Workers

_____ Salary = 1.1 * Salary

☐ mod

☐ change

☐ where

☒ set

Correct!

Question 28

1 / 1 pts

Which of the followings should be inserted into the blank for the query to find the department with the **highest average salary**?

Select T.Department, _____(T.crt)

From (

Select _____(Salary) as crt

From Workers

Group By Department

) as T

Correct!

☐ max, mean

☒ max, avg

☐ mean, max

☐ avg, max

Question 29

1 / 1 pts

Which of the following statements about Views in SQL is **NOT** true?

Correct!

☒

Views need to be manually updated when the tables that were used to create it have changed.

☐ A View is a single table derived from other tables

☐ Views can be referenced in FROM clauses just like regular tables.

☐ Views are considered to be a virtual tables

Question 30

1 / 1 pts

Which of the following keywords in SQL performs renaming on tables/attributes?

Correct!☐ Select☐ Where☐ From☒ AsQuiz Score: **25** out of 30