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| Data Science Academy Bootcamp | | | | | | | | |
| Final exam | | | | | | | | |
| **Name:**  **Surname:** | **Shahin Mammadov** | |  | | | | **Date:** | 11/19/2022 |
| **Exam:** Data Science with SQL | |  | |  |  | | | |
| **Instructions:** You will be given ***1 hour and 45 minutes*** to complete the examination. There are 2 parts and 3 types of questions including: True/False, Multiple choice and Practical.  **First part** will last ***45 minutes****,* and you must write answers directly on word documents. Internet search is **not** permitted.  **Second part** is Practical question and will last ***60 minutes***. It is your responsibility to submit your exam answers electronically to [homework@dsa.az](mailto:homework@dsa.az) with **“SQL Final Exam”** subject.  Before you leave the exam you **MUST** contact a mentor to confirm that you have submitted your examination.  Good Luck! | | | | | | | | |
| **PART 1: TRUE/FALSE** | | | | | | | | |
| **Directions: Read each statement below carefully. Place a + mark on the “True” cell if you think a statement is TRUE, and on the “False” cell if you think the statement is FALSE.**  **Each question is 1 point.** | | | | | | | | |
|  | | | | | | True | False | |
| 1. Each table can contain more than one primary key. | | | | | |  | X | |
| 2. A SELECT statement within another SELECT statement is called a subquery. | | | | | | X |  | |
| 3. SELECT DISTINCT is used to see duplicate columns in a query. | | | | | |  | X | |
| 4. Data manipulation language (DML) commands are used to define a database, including creating, altering, and dropping tables and establishing constraints. | | | | | |  | X | |
| 5. DROP statements are used to remove a database or table permanently from the system. | | | | | |  | X | |

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| **PART 1: MULTIPLE CHOICE** |
| **Directions: Read each question carefully, and place a + next to the answer that best fits the question.** |
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| 1. Which one of the following is a DML statement?   a) ADD  b) ALTER  c) UPDATE +  d) MODIFY |
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| **PART 1: MULTIPLE CHOICE** |
| **Directions: Read each question carefully, and place a + next to the answer that best fits the question.** |
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| 1. You need to determine the day of the week for a particular date in the future. Which function will reveal this information?   a) TO\_CHAR +  b) DAY\_OF\_WEEK  c) TO\_DATE  d) None of the above    3. Which statements are true regarding the GROUP BY clause in a SQL statement?  a) You can use column aliases in the GROUP BY clause.  b) Using the WHERE clause after the GROUP BY clause excludes the rows after creating groups.  c) The GROUP BY clause is mandatory if you are using an aggregate function in the SELECT clause.  d) Using the WHERE clause before the GROUP BY clause excludes the rows before creating groups. +  4. Which query returns the highest salary in the table?  a) SELECT department\_id, MAX(salary) FROM employees GROUP BY department\_id;  b) SELECT MAX (salary) FROM employees; +  c) SELECT MAX (salary) FROM employees GROUP BY department\_id;  d) SELECT MAX (salary) FROM employees GROUP BY department\_id HAVING MAX (salary) = MAX (MAX (salary));  5. What is true about the UNION operator?  a) It returns rows from the combined queries along with NULL values  b) It returns rows for the combined queries after eliminating duplicates +  c) It returns rows for the combined queries along with duplicate values  d) It returns rows for the combined queries ignoring the NULL values |
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