

WORKSHEET 6 SQL – Solutions – Kumar Gourabh (Internship 10)

Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question. (Marked answers in Bold)

1. Which of the following are TCL commands?

- A. **Commit**
- B. Select
- C. **Rollback**
- D. **Savepoint**

2. Which of the following are DDL commands?

- A. **Create**
- B. Select
- C. **Drop**
- D. **Alter**

Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.

3. Which of the following is a legal expression in SQL?

- A. SELECT NULL FROM SALES;
- B. **SELECT NAME FROM SALES;**
- C. SELECT * FROM SALES WHEN PRICE = NULL;
- D. SELECT # FROM SALES;

4. DCL provides commands to perform actions like-

- A. Change the structure of Tables
- B. Insert, Update or Delete Records and Values
- C. **Authorizing Access and other control over Database**
- D. None of the above

5. Which of the following should be enclosed in double quotes?

- A. Dates
- B. **Column Alias**
- C. String
- D. All of the mentioned

6. Which of the following command makes the updates performed by the transaction permanent in the database?

- A. ROLLBACK
- B. **COMMIT**
- C. TRUNCATE
- D. DELETE

7. A subquery in an SQL Select statement is enclosed in:

- A. **Parenthesis - (...).**
- B. brackets - [...].
- C. CAPITAL LETTERS.
- D. braces - {...}.

8. The result of a SQL SELECT statement is a :-

- A. FILE
- B. REPORT
- C. **TABLE**
- D. FORM

9. Which of the following do you need to consider when you make a table in a SQL?

- A. Data types
- B. Primary keys
- C. Default values
- D. **All of the mentioned**

10. If you don't specify ASC and DESC after a SQL ORDER BY clause, the following is used by ___?

- A. **ASC**
- B. DESC
- C. There is no default value
- D. None of the mentioned

Q11 to Q15 are subjective answer type questions, Answer them briefly.

11. What is denormalization?

Ans: Denormalization is a database optimization technique in which we add redundant data to one or more tables. This can help us avoid costly joins in a relational database.

12. What is a database cursor?

Ans: A database cursor can be thought of as a pointer to a specific row within a query result. The pointer can be moved from one row to the next. Depending on the type of cursor, we may be even able to move it to the previous row.

13. What are the different types of the queries?

Ans: Five types of SQL queries are 1) Data Definition Language (DDL) 2) Data Manipulation Language (DML) 3) Data Control Language(DCL) 4) Transaction Control Language(TCL) and, 5) Data Query Language (DQL)

- Data Definition Language(DDL) helps to define the database structure or schema.
- Data Manipulation Language (DML) allows to modify the database instance by inserting, modifying, and deleting its data.
- DCL (Data Control Language) includes commands like GRANT and REVOKE, which are useful to give "rights & permissions."
- Transaction control language or TCL commands deals with the transaction within the database.
- Data Query Language (DQL) is used to fetch the data from the database.

14. Define constraint?

Ans: Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table. If there is any violation between the constraint and the data action, the action is aborted.

Constraints can be column level or table level. Column level constraints apply to a column, and table level constraints apply to the whole table.

The following constraints are commonly used in SQL:

- NOT NULL - Ensures that a column cannot have a NULL value
- UNIQUE - Ensures that all values in a column are different
- PRIMARY KEY - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
- FOREIGN KEY - Prevents actions that would destroy links between tables
- CHECK - Ensures that the values in a column satisfies a specific condition
- DEFAULT - Sets a default value for a column if no value is specified
- CREATE INDEX - Used to create and retrieve data from the database very quickly

15. What is auto increment?

Ans: **Auto-increment** allows a unique number to be generated automatically when a new record is inserted into a table. Often this is the primary key field that we would like to be created automatically every time a new record is inserted.