# WORKSHEET 6 SQL

**Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.**

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?**

Answer - Denormalization is a database optimization technique in which redundant data is added to one or more tables to improve query performance by reducing the number of joins required between tables. It involves intentionally breaking normal database normalization rules and creating duplicate copies of data in order to reduce the need for complex joins and improve query response time. Denormalization can be a useful technique for improving the performance of read-heavy databases, but it can also lead to increased complexity, larger storage requirements, and potential data inconsistency issues.

**12. What is a database cursor?**

Answer - A database cursor is a control structure used by database management systems to manipulate data in a database. It is used to traverse and retrieve data from a result set returned by a query. Cursors are used to iterate over a set of rows returned by a query and perform operations on each row individually. They allow for the sequential processing of query results and enable efficient access to large datasets. Cursors can be used to perform a variety of tasks, such as updating, deleting, or inserting data, or retrieving data from multiple tables in a database.



**13. What are the different types of the queries?**

Answer - In SQL, there are mainly four types of queries:

1. Select Query: A SELECT query is used to retrieve data from one or more tables in a database. It returns a result set of the selected data.
2. Insert Query: An INSERT query is used to insert new rows into a table in a database.
3. Update Query: An UPDATE query is used to modify existing data in a table in a database.
4. Delete Query: A DELETE query is used to remove rows from a table in a database.

**14. Define constraint?**

Answer - In SQL, a constraint is a rule that is enforced on a table column or group of columns. It is used to limit the type of data that can be inserted, updated or deleted from a table based on certain conditions. Constraints are used to ensure the accuracy, consistency, and integrity of the data in a database. There are different types of constraints such as Primary Key, Foreign Key, Unique, Check, and Not Null constraints. Each of these constraints has a specific purpose to restrict data to be entered in a table.

**15. What is auto increment?**

Answer - Auto increment is a feature in a database management system that automatically assigns a unique, incremental value to a column whenever a new row is inserted into a table. It is commonly used to create primary keys for tables, ensuring that each row has a unique identifier. For example, if a table has an auto increment column called "ID", the first row inserted will have an ID of 1, the second row will have an ID of 2, and so on. Auto increment simplifies the process of managing primary keys, as it eliminates the need to manually generate unique values for each new row.