# **WORKSHEET 6 SQL**

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

Which of the following are TCL commands? A. Commit B. Select
Rollback D. Savepoint

Ans = A. Commit C. Rollback D. Savepoint

2. Which of the following are DDL commands? A. Create B. Select C. Drop D. Alter

Ans = A. Create 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;

Ans = B. SELECT NAME FROM SALES;

4. DCL provides commands to perform actions likeA. 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 Ans = C. Authorizing Access and other control over Database

5. Which of the following should be enclosed in double quotes? A. Dates B. Column Alias C. String D. All of the mentioned

Ans = B. Column Alias

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

Ans = B. COMMIT

7. A subquery in an SQL Select statement is enclosed in: A. Parenthesis - (...). B. brackets - [...]. C. CAPITAL LETTERS. D. braces - {...}.

Ans = A. Parenthesis - (...).

8. The result of a SQL SELECT statement is a :- A. FILE B. REPORT C. TABLE D. FORM

Ans = C. TABLE

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

Ans = 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

Ans = A. ASC

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

### 11. What is denormalization?

Ans = Denormalization is the process of adding precomputed redundant data to an otherwise normalized relational database to improve read performance of the database. Normalizing a database involves removing redundancy so only a single copy exists of each piece of information. Denormalizing a database requires data has first been normalized. With denormalization, the database administrator selectively adds back specific instances of redundant data *after* the data structure has been normalized. A denormalized database should not be confused with a database that has never been normalized.

Using normalization in sql, a database will store different but related types of data in separate logical tables, called relations. When a query combines data from multiple tables into a single result table, it is called a join. The performance of such a join in the face of complex queries is often the occasion for the administrator to explore the denormalization alternative.

#### 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, you may be even able to move it to the previous row. Think of it this way: a sql result is like a bag, you get to hold a whole bunch of rows at once, but not any of them individually; whereas, a cursor is like a pair of. With it, you can reach into the bag and grab a row, and then move onto the next. SalesPersonID is less than 10031. If, during the update operation, there is an error, then no rows are updated. The entire update is treated as a transaction. Now by using a cursor, we can iterate or move from one row to the next and updating rows as we go. If It updates every row in the table esgl SalesPerson where the we encounter an error, try something else, or skip the operation. The difference is, that when you use cursors, you can act on each row.

13. What are the different types of the queries? Ans = Databases represent large swimming pools. If you don't know how to swim, the deep end of the pool at summer camp can seem like a very daunting, dark place. However, that same pool could be a stunning and refreshing place on a sunny day, if you know how to swim.

Similarly, a huge database can be overwhelming if you don't have an efficient way to sort, manage, and find the data you need. That same

database can turn into a fun and useful pool of possibilities if you know the most common and simple queries of SQL.SQL makes it easy to work with massive databases without getting overwhelmed or needing to spend hours manually scrolling through Excel spreadsheets. This post covers 13 of the most used SQL queries that you can use to find, sort, arrange, modify, and manage data in a database of any size.

Before we start talking about them, we should realize that these queries work on all types of SQL engines available in the market.

## 14. Define constraint?

Ans = SQL constraints are a set of rules implemented on tables in relational databases to dictate what data can be inserted, updated or deleted in its tables. This is done to ensure the accuracy and the reliability of information stored in the table Constraints enforce limits to the data or type of data that can be inserted/updated/deleted from a table. The purpose of constraints is to maintain the data integrity during an update/delete/insert into a table. Once the constraint is placed, if any operation in the database does not follow the rules specified by the constraint, the particular operation is aborted. In this article, we will go through what SQL constraints are, what are the different kinds of SQL constraints are commonly used and how to implement and get rid of them. First, however, we will take a brief look into why they are needed. Before we get into the details of what SQL constraints are, let's take a look at why they are necessary. In order to arrive at that answer, we need to first understand the way in which information is stored in relational databases and why it is of primal importance to ensure that frameworks are in place governing what information can be entered or altered in a way that that information in the tables are not corrupted.

#### 15. What is auto increment?

Ans = Auto increment in SQL is a powerful keyword in SQL. It is used to generate auto-incremented data, such as serial numbers, every time. Applying the auto-increment functionality to a field in sql will automatically produce and deliver a unique value for each record you insert into the table. This column is frequently used as the primary key, and each item you add must have a different value. It can also be used to create.

Columns with unique constraints. The advantages to using numeric, auto incremented primary keys are numerous, but the most impactful benefits are faster speed when performing queries and data-independence when searching through thousands of records which might contain frequently altered data elsewhere in the table. With a consistent and unique numeric identifier, applications can take advantage of these faster and more reliable queries.