

WORKSHEET 6 SQL

1-A,C,D

2-A ,C

3-B

4-C

5-D

6-B

7-A

8-C

9-B

10-A

11-Denormalization is the process of adding precomputed redundant data to an otherwise normalized relational database to improve read performance of the database. 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.

12-A database cursor is an identifier associated with a group of rows. It is, in a sense, a pointer to the current row in a buffer.

Use a cursor in the following cases:

- Statements that return more than one row of data from the database server:
 - A SELECT statement requires a select cursor.
 - An EXECUTE FUNCTION statement requires a function cursor.
- An INSERT statement that sends more than one row of data to the database server requires an insert cursor.

13-SQL Query is basically used to query or retrieve information from the databases. We can perform the following operations using the SQL query --

- Use SQL query to create a new database and insert data into the database
- Use the SQL query to retrieve (or fetch) data from the database. Also, to modify or update the existing data in the database.
- To delete or drop the data or table from the database using the SQL query . Also, we can create a new table after that,
- Using the SQL query to set permissions for the tables, views and procedures. Also, to create functions, views and stored procedures.

Types of SQL Queries



Types of SQL Queries

Select Query

The select query is the least difficult kind of inquiry and thus, it is likewise the most ordinarily utilized one in Microsoft Access databases. It very well may be utilized to choose and show information from possibly one table or a progression of them relying upon what is required.

Action Query

At the point when the activity question is called, the database experiences a particular activity relying upon what was indicated in the query itself. This can incorporate such things as making new tables, erasing lines from existing ones and refreshing records or making totally new ones.

Action queries are extremely famous in information the board since they take into account numerous records to be changed at one time rather than just single records like in a select query.

Parameter Query

In Microsoft Access, a parameter query works with different sorts of queries to get whatever outcomes you are after. This is on the grounds that, when utilizing this kind of query, you can pass a parameter to an alternate query

Aggregate Query

A unique kind of query is known as an aggregate query. It can chip away at different queries, (for example, choice, activity or parameter) simply like the parameter query does, yet as opposed to passing a parameter to another query it aggregates up to the things by chosen by the various groups. It basically makes a summation of any chosen property in your table.

14-Constraints are the rules that we can apply on the type of data in a table. That is, we can specify the limit on the type of data that can be stored in a particular column in a table using constraints.

The available constraints in SQL are:

- **NOT NULL:** This constraint tells that we cannot store a null value in a column. That is, if a column is specified as NOT NULL then we will not be able to store null in this particular column any more.
- **UNIQUE:** This constraint when specified with a column, tells that all the values in the column must be unique. That is, the values in any row of a column must not be repeated.
- **PRIMARY KEY:** A primary key is a field which can uniquely identify each row in a table. And this constraint is used to specify a field in a table as primary key.
- **FOREIGN KEY:** A Foreign key is a field which can uniquely identify each row in another table. And this constraint is used to specify a field as foreign key.
- **CHECK:** This constraint helps to validate the values of a column to meet a particular condition. That is, it helps to ensure that the value stored in a column meets a specific condition.

- **DEFAULT:** This constraint specifies a default value for the column when no value is specified by the user.

15-The auto increment in SQL is a feature that is applied to a field so that it can automatically generate and provide a unique value to every record that you enter into an SQL table. This field is often used as the PRIMARY KEY column, where you need to provide a unique value for every record you add. However, it can also be used for the UNIQUE constraint columns.