* What is SQL ?

Ans:- SQL is a standard language for accessing and manipulating databases.

* What is DDL, DML, DQL, TCL and DCL?

Ans:-

* **Data Definition Language (DDL):-**

DDL queries are made up of SQL commands that can be used to define the structure of the database and modify it.

o **CREATE** Creates databases, tables, schema, etc.

o **DROP:** Drops tables and other database objects

o **DROP COLUMN:** Drops a column from any table structure

o **ALTER:** Alters the definition of database objects

o **TRUNCATE:** Removes tables, views, procedures, and other database objects

o **ADD COLUMN:** Adds any column to the table schema

* **Data Manipulation Language (DML):-**

These SQL queries are used to manipulate data in a database.

* **SELECT INTO:** Selects data from one table and inserts it into another
* **INSERT:** Inserts data or records into a table
* **UPDATE:** Updates the value of any record in the database
* **DELETE:** Deletes records from a table
* **Data Control Language (DCL):-**

These SQL queries manage the access rights and permission control of the database.

* **GRANT:** Grants access rights to database objects
* **REVOKE:** Withdraws permission from database objects
* **Transaction Control Language (TCL):-**

TCL is a set of commands that essentially manages the transactions in a database and the changes made by the DML statements. TCL allows statements to be grouped together into logical transactions.

* **COMMIT:** Commits an irreversible transaction, i.e., the previous image of
* the database prior to the transaction cannot be retrieved
* **ROLLBACK:** Reverts the steps in a transaction in case of an error
* **SAVEPOINT:** Sets a save point in the transaction to which rollback can be
* executed
* **SET TRANSACTION:** Sets the characteristics of the transaction
* **Data Query Language:-**
* **Select: Retrieve the data from table .**

Some of The Most Important SQL Commands

* SELECT - extracts data from a database
* UPDATE - updates data in a database
* DELETE - deletes data from a database
* INSERT INTO - inserts new data into a database
* CREATE DATABASE - creates a new database
* ALTER DATABASE - modifies a database
* CREATE TABLE - creates a new table
* ALTER TABLE - modifies a table
* DROP TABLE - deletes a table
* CREATE INDEX - creates an index (search key)
* DROP INDEX - deletes an index

**2. Difference between Delete and Truncate?**

**Ans**: The difference between DELETE and TRUNCATE commands are as follows:

* TRUNCATE is a DDL command, and DELETE is a DML command.
* With TRUNCATE, we cannot really execute and trigger, while with DELETE, we
* can accomplish a trigger.
* If a table is referenced by foreign key constraints, then TRUNCATE will not work.
* So, if we have a foreign key, then we have to use the DELETE command.

**3. Difference between Delete and Drop?**

**Ans:** If a table is dropped, all things associated with that table are dropped as well. This

includes the relationships defined on the table with other tables, access privileges, and grants that the table has, as well as the integrity checks and constraints.

To create and use the table again in its original form, all the elements associated with the

table need to be redefined.

However, if a table is truncated, there are no such problems as mentioned above. The table

retains its original structure.

**4. Difference between Table and Field?**

**Ans:** An organized data in the form of rows and columns is said to be a table. Simply put, it is

a collection of related data in a table format.

Here rows and columns are referred to as tuples and attributes, and the number of columns in a table is referred to as a field. In the record, fields represent the characteristics and attributes and contain specific information about the data.

**6. What is Alias?**

**Ans:** it is a temporary name of table or field.