

What is SQL?

- SQL stands for Structured Query Language
 - SQL lets you access and manipulate databases
 - SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization (ISO) in 1987
- 1.

What Can SQL do?

- SQL can execute queries against a database
 - SQL can retrieve data from a database
 - SQL can insert records in a database
 - SQL can update records in a database
 - SQL can delete records from a database
 - SQL can create new databases
 - SQL can create new tables in a database
 - SQL can create stored procedures in a database
 - SQL can create views in a database
 - SQL can set permissions on tables, procedures, and views
- 2.
3. In SQL we have 3 types of sub languages called DDL,DML,DQL
4. Creating a table and dropping or deleting a table comes under DDL..
5. To create a table in SQL we use create table function and we have to define columns with their datatype inside the table

```
create table amazon_orders
(
order_id integer,
order_date date,
product_name varchar(100),
total_price decimal(6,2),
payment_method varchar(20)
);
```

- 6.
7. Now it creates a table with five columns

8. To insert the data inside this table we use insert command and it comes under data manipulation language

INSERT INTO Syntax

It is possible to write the `INSERT INTO` statement in two ways:

1. Specify both the column names and the values to be inserted:

```
INSERT INTO table_name (column1, column2, column3, ...)
VALUES (value1, value2, value3, ...);
```

2. If you are adding values for all the columns of the table, you do not need to specify the column names in the SQL query. However, make sure the order of the values is in the same order as the columns in the table. Here, the `INSERT INTO` syntax would be as follows:

```
INSERT INTO table_name
VALUES (value1, value2, value3, ...);
```

9.

```
--DML -> data Manipulation language
insert into amazon_orders values(1,'2022-10-01','Baby Milk',30.5,'UPI');
```

10.

11. To delete the data from the table we use delete command it also comes under DML
12. To delete entire rows(data) of the table we use “delete from table name;”
13. Refer for delete : https://www.w3schools.com/sql/sql_delete.asp
14. To delete the table we use drop command “drop table **table name**” it deletes the entire table
15. But if you want to just delete the data and store the structure of the table then we have to use “**truncate**” command : <https://www.geeksforgeeks.org/sql-drop-truncate/#>
16. To delete data we can also use delete from “**table name**” it works same like truncate
17. DQL- It helps us to query the table
18. If we want to see entire rows of our table we use “select * from **table name**.”
19. If we want to select specific columns then we use

```
--limiting columns or selecting specific columns
select product_name,order_date,total_price from amazon_orders;
```

20. If we want to print limited number of rows we use..we can choose top 5 or something like

that

```
--limiting rows  
select top 1 * from amazon_orders;
```

21. If we want to sort the data based ..then we have to select the number of rows from the table and we have use order by function :

https://www.w3schools.com/sql/sql_orderby.asp

22. Next just practise these commands