1. **What is SQL?**

**SQL stands for structured query language.**

**SQL is used to perform operations on the records stored in the database such as updating records, deleting records, creating & modifying tables and views.**

**SQL is just a query language not a database.**

**To perform SQL queries you need to install any database, oracle , mySQL, mango DB, postgre SQL.**

**SQL IS NOT CASE SENSITIVE**

1. **What is databases?**

**A database is  an organized collection of structured information, or data, typically stored electronically in a computer system. A database is usually controlled by a database management system (DBMS).**

1. **What is data base management?**

**A database management system (or DBMS) is essentially nothing more than a computerized data-keeping system. Users of the system are given facilities to perform several kinds of operations on such a system for either manipulation of the data in the database or the management of the database structure itself.**

1. **What is data table?**

**A data table is a range of cells in which you can change values in some of the cells and come up with different answers to a problem.**

1. **What is data type?**

**A data type is an attribute associated with a piece of data that tells a computer system how to interpret its value. Understanding data types ensures that data is collected in the preferred format and the value of each property is as expected.**

1. **Data types in sql?**

* **Numeric**
* **string**
* **date and type**

1. **DDl-(Database Definition Language)**

**A data definition language (DDL) is a computer language used to create and modify the structure of database objects in a database.**

**These database objects include views, schemas, tables, indexes, etc.**

DDL DATA DEFINITION LANGUAGE

* CREATE TABLE
* ALTER TABLE
* TRUNCATE TABLE
* RENAME TABLE
* DROP TABLE

Enter password: \*\*\*\*\*\*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 19

Server version: 8.0.30 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database dbfirst;

Query OK, 1 row affected (0.09 sec)

mysql> use dbfirst;

Database changed

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| abccompany |

| companies |

| company |

| dbfirst |

| dbramya |

| flower |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

+--------------------+

10 rows in set (0.46 sec)

mysql> create table student (sid int,sname varchar(10),sdegree varchar(20));

Query OK, 0 rows affected (1.51 sec)

mysql> desc student;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| sid | int | YES | | NULL | |

| sname | varchar(10) | YES | | NULL | |

| sdegree | varchar(20) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

3 rows in set (0.29 sec)

mysql> insert into student values(1,'ramya','b.e');

Query OK, 1 row affected (0.15 sec)

mysql> insert into student values(2,'priya','b.e');

Query OK, 1 row affected (0.06 sec)

mysql> insert into student values(3,'hemasri','b.e');

Query OK, 1 row affected (0.09 sec)

mysql> insert into student values(4,'vijaya','b.e');

Query OK, 1 row affected (0.06 sec)

mysql> insert into student values(5,'selvakumar','b.e');

Query OK, 1 row affected (0.04 sec)

mysql> select\*from student;

+------+------------+---------+

| sid | sname | sdegree |

+------+------------+---------+

| 1 | ramya | b.e |

| 2 | priya | b.e |

| 3 | hemasri | b.e |

| 4 | vijaya | b.e |

| 5 | selvakumar | b.e |

+------+------------+---------+

5 rows in set (0.05 sec)

mysql> alter table student add column scity varchar(40);

Query OK, 0 rows affected (0.27 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc student;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| sid | int | YES | | NULL | |

| sname | varchar(10) | YES | | NULL | |

| sdegree | varchar(20) | YES | | NULL | |

| scity | varchar(40) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

4 rows in set (0.03 sec)

mysql> select\*from student;

+------+------------+---------+-------+

| sid | sname | sdegree | scity |

+------+------------+---------+-------+

| 1 | ramya | b.e | NULL |

| 2 | priya | b.e | NULL |

| 3 | hemasri | b.e | NULL |

| 4 | vijaya | b.e | NULL |

| 5 | selvakumar | b.e | NULL |

+------+------------+---------+-------+

5 rows in set (0.00 sec)

mysql> show tables;

+-------------------+

| Tables\_in\_dbfirst |

+-------------------+

| student |

+-------------------+

1 row in set (0.43 sec)

mysql> update student set scity='chennai;

'>

'>

'> ^C

mysql> update student set scity='chennai';

Query OK, 5 rows affected (0.07 sec)

Rows matched: 5 Changed: 5 Warnings: 0

mysql> select\*from student;

+------+------------+---------+---------+

| sid | sname | sdegree | scity |

+------+------------+---------+---------+

| 1 | ramya | b.e | chennai |

| 2 | priya | b.e | chennai |

| 3 | hemasri | b.e | chennai |

| 4 | vijaya | b.e | chennai |

| 5 | selvakumar | b.e | chennai |

+------+------------+---------+---------+

5 rows in set (0.00 sec)

mysql> truncate table student;

Query OK, 0 rows affected (0.30 sec)

mysql> select\*from table;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'table' at line 1

mysql> select\*from student;

Empty set (0.00 sec)

mysql> rename table hi;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at line 1

mysql> alter table student rename to hi;

Query OK, 0 rows affected (0.26 sec)

mysql> desc hi;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| sid | int | YES | | NULL | |

| sname | varchar(10) | YES | | NULL | |

| sdegree | varchar(20) | YES | | NULL | |

| scity | varchar(40) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

mysql> select\*from hi;

Empty set (0.03 sec)

mysql> drop table student;

ERROR 1051 (42S02): Unknown table 'dbfirst.student'

mysql> drop table hi;

Query OK, 0 rows affected (0.11 sec)

mysql> slect \*from hi;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'slect \*from hi' at line 1

mysql> select\*from hi;

ERROR 1146 (42S02): Table 'dbfirst.hi' doesn't exist

mysql> drop database dbfirst;

Query OK, 0 rows affected (0.06 sec)

mysql> show database;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'database' at line 1

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| abccompany |

| companies |

| company |

| dbramya |

| flower |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

+--------------------+

9 rows in set (0.00 sec)

mysql>