

1. Query Language : Query means searching.

We can search for or extract something from the database by passing query

Query Types:

- a. **Select Query** → extract by id with full record
- b. **Parameter Query** → extracts by passing a range/parameter
- c. **Crosstab Query** → extracts in summary/group
- d. **Unmatched Query** → extracts which are unmatched
- e. **Action Query** → any changes in database.

Action queries are 4 types:

- i. make table query → create a new table
- ii. append query → adding record
- iii. update query → updating a record's data
- iv. delete query → record/data or whole table delete

Query Language :

- a. QUEL → query language
- b. QBE → query by example
- c. SQL → Structured query language

2. SQL : Structured Query Language

Types of SQL:

- a. DML → Data Manipulation Language.
Ex: Select, Insert, update, delete
- b. DDL → Data Definition Language.
Ex: Create, Alter, Drop
- c. DCL → Data Control Language.
Ex:
- d. DTL → Data Transaction Language
Ex:

DROP for Table and Delete for Record

3. MySQL Download and Install

4. MySQL Environment Variable Setup

5. Data Types :

- a. **String :** CHAR(size) → CHAR(5) = “abcde”,
VARCHAR(size) → VARCHAR(10) = “a”, “bcd”, “efgh”,
“xy”
TEXT(size) → TEXT(100) = “highest length 100”
BLOB(size) → File, Image, [Binary data/file]
- b. **Neumeric :** INT(size) → a whole number.
FLOAT(size) → fractional number, included INT type.
DOUBLE(size) → as like as FLOAT.
- c. **DATE-TIME :** DATE → extract right now time.
DATETIME, TIMESTAMP, YEAR

Follow w3school.com for more data types.

6. SQL Syntax - CREATE, RENAME, DROP in Table : not case-sensitive.

To create a database, we have to use
CREATE DATABASE *DATABASENAME* syntax.
Otherwise by default it will be made on system(sys) database.

To use created database we have to use
USE DATABASE(can be avoided) *DATABASENAME* syntax.

To see available database we have to use SHOW DATABASES syntax.

Semicolon ; at the end of every syntax. Syntax can be in one/multi line.
CREATE TABLE _____; DROP TABLE _____;
DROP TABLE _____;

CREATE TABLE : create a table in database with field & record.
for a Student Table →

```
CREATE TABLE STUDENT(table name) (  
    Fieldname DataType  
    Roll INT,  
    Name VARCHAR (30)  
);
```