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UNIT 3
For XII CSc:
Database Management

UNIT 2
For XII IP:
Database Query using SQL

UNIT 4
For XI IP:

Database concepts and the Structured Query Language



- > STRUCTURED QUERY LANGUAGE
  - Introducing SQL
  - Key Features of SQL
  - About MySQL
  - Classification of SQL commands
  - DDL Vs DML commands

# STRUCTURED QUERY LANGUAGE

# Introducing SQL

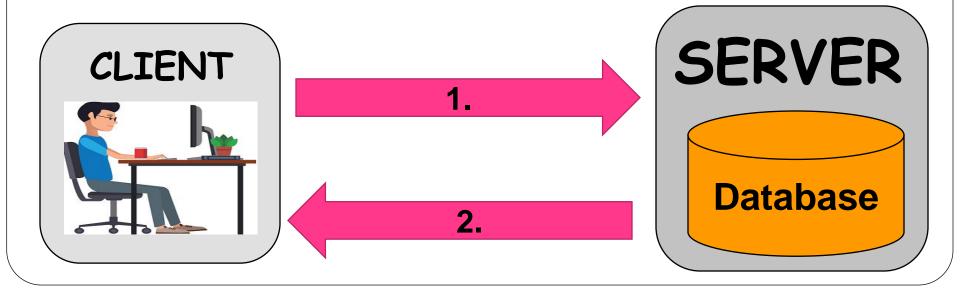
The Structured Query Language(SQL) is a language that enables you to create and operate on relational databases, which are sets of related information stored in tables. SQL is the standard relational database language.

#### **Key Features of SQL**

- Client/Server environment
- Large database and space management
- High Availability, free of cost
- Portability
- Compatibility

- Convertibility
- Very fast with ease of use
- Openness, Industry standard
- Manageable Security
- Many concurrent database users

#### **CLIENT-SERVER ARCHITECTURE**



## **About MySQL**

## www.mysql.org

- Freely available open source Relational Database Management System (RDBMS) which is built on the SQL language.
- MySQL is rich in variety of features which support a secured environment for storing, maintaining and accessing data.
- Fast,reliable,scalable.
- A single table developed using MySQL can contain thousands of tables and each table can hold thousands of records. Amazing!!!! Right!!!
- Chief Inventor- Michael Widenius (a.k.a.Monty)
- > MySQL name is after Monty's daughter "My".

#### <u>CLASSIFICATION OF SQL COMMANDS</u> <u>Processing capabilities of SQL</u>

- Data Definition Language (DDL) commands
   (CREATE, ALTER, DROP, RENAME, TRUNCATE, COMMENT)
  - Data Control Language (DCL) commands (GRANT, REVOKE)
- Data Manipulation Language (DML) commands (INSERT, UPDATE, DELETE, SELECT)
- Transaction Control Language (TCL) commands (COMMIT, ROLLBACK, SAVEPOINT, SET TRANSACTION)
- Session Control Language commands (ALTER SESSION, SET ROLL)
- System Control Language commands

#### **SQL** commands to learn.....

DDL	DML
DDL stands for data definition language. It is component language of SQL, that provides commands for defining various database objects.  Eg. Create, Alter, Drop	DML stands for Data Manipulation Language is a special language to manipulate data using a set of procedures.  Eg. Insert, Delete, Update, Select
It provides statements for the creation and deletion of tables, indexes, views and adding or modifying new field in a table.	It provides statements to enter, update, delete data and perform complex queries on these table.

#### **Data Dictionary**

It is the file that stores data about data i.e. it stores the metadata.

Our greatest
weakness
lies in giving up.
The most certain way
to succeed is always
to try just one
more time.

**Thomas Edison** 

