SQL : Structured Query Language

SQL use English statement which help to interact with database to do some operation like insert or create, delete, update and retrieve etc.

Command or query

TrainerAndStudent

TId TName Tech Sid SName Age

1 Raj MySQL 100 Reeta 21

1 Raj MySQL 101 Seeta 22abc

1 Raj MySQL 102 Meeta 23

Trainer

PK 🡪 Primary key : if column is pk. That column doesn’t allow duplicate. It doesn’t allow null value (we can’t leave empty we need to enter the value mandatory). In single table we can make only one column as PK.

PK

TId TName Tech

1 Raj MySQL

2 Ravi Python

3 Ramesh

4 Java

Student

PK FK PK for trainer table.

Sid SName Age TSId

100 Reeta 21 1 tuple

101 Meeta 22 1

102 Veeta 23 2

103 Leeta 24

Foreign key. FK is use to connect PK of same table or different table. If column if FK that column allow only those value which present in PK column. FK can allow duplicate but only those value which present in PK column. In single table we can create more than one column as FK. FK can allow null value.

According to RDBMS table is known as relation. Column is known as attribute and record is known as tuple.

RDBMS Databases

Database names

MySQL Oracle

Oracle Oracle

SQL Server micro soft

DB2

Postgres

All these database use common English statement language ie SQL which help to interact with database. 85 to 90% query or command are common. 10 to 15% query can change when we move from one database to another database.

SQL language divided into 5 sub types.

1. DDL: Data definition language
   1. Create, drop, rename, truncate, alter etc: these all command are use to create as well as drop the table structure.
2. DML: Data Manipulation language
   1. Insert, delete and update query or command part of DML.
3. DRL or DQL: Data retrieval or query language
   1. Select with lot of condition command part of DQL or DRL
4. TCL: Transactional control language
   1. Rollback, commit etc.
5. DCL: Data control language
   1. Grant, revoke : provide the permission for user base upon their role.

show databases; this command help use to display all database present in our account.

use databasename; this command is use to move inside particular database.

use sys;

show tables; this command is use to view all table name present in particular or sys database.