DATA DEFINITION LANGUAGE

AIM

white query sing Mysql Objective :Create table in the database;

OBJECTIVES

To understand DDL commands

THEORY

It is very important to understand the database before learning MySQL. A database is an application that stores the organized collection of records. It can be accessed and manage by the user very easily. It allows us to organize data into tables, rows, columns, and indexes to find the relevant information very quickly. Each database contains distinct <u>API</u> for performing database operations such as creating, managing, accessing, and searching the data it stores. Today, many databases available like MySQL, Sybase,Oracle,MongoDB,PostgreSQL,SQL Server, etc. In this section, we are going to focus on MySQL mainly.

What is MySQL?

MySQL is currently the most popular database management system software used for managing the relational database. It is open-source database software, which is supported by Oracle Company. It is fast, scalable, and easy to use database management system in comparison with Microsoft SQL Server and Oracle Database. It is commonly used in conjunction with <u>PPH</u> scripts for creating powerful and dynamic server-side or web-based enterprise applications.

It is developed, marketed, and supported by **MySQL AB, a Swedish company**, and written in <u>C</u> <u>programming language</u> and C++ programming language. The official pronunciation of MySQL is not the My Sequel; it is **My Ess Que Ell**. However, you can pronounce it in your way. Many small and big companies use MySQL. MySQL supports many Operating Systems like Windows, Linux, MacOS, etc. with C, C++, and Java languages.

MySQL is a <u>Relational Database Management System</u> (RDBMS) software that provides many things, which are as follows:

- It allows us to implement database operations on tables, rows, columns, and indexes.
- It defines the database relationship in the form of tables (collection of rows and columns), also known as relations.
- It provides the Referential Integrity between rows or columns of various tables.
- It allows us to updates the table indexes automatically.
- It uses many SQL queries and combines useful information from multiple tables for the endusers.

DATABASE QUERIES

• Create database

We can create a new database in MySQL by using the CREATE DATABASE statement **CREATE DATABASE** [IF NOT EXISTS] database_name

Select database

SELECT Database is used in MySQL to select a particular database to work with USE database_name

Drop database

We can drop an existing database in MySQL by using the DROP DATABASE statement **DROP DATABASE** [IF EXISTS] database_name;

TABLE QUERIES

Create table

CREATE TABLE [IF NOT EXISTS] table_name

Alter table

ALTER TABLE table_name

Rename table

RENAME TABLE old_tab1 TO new_tab1,

Truncate table

TRUNCATE [TABLE] table_name;

Describe table

{DESCRIBE | DESC} table_name

Drop table

DROP [TEMPORARY]TABLE [IF EXISTS] table_name [RESTRICT | CASCAD

Temporary table

CREATE TEMPORARY TABLE table_name(

Copy table

CREATE TABLE new_table_name

SELECT column1, column2, column3

FROM existing_table_name;

Repair table

REPAIR TABLE name;

- Add/Delete columns
- ALTER TABLE table name
- **ADD COLUMN** column_name column_definition [**FIRST**|**AFTER** existing_column];
- Show colums

SHOW COLUMNS FROM column name;

- Rename colums
- ALTER TABLE balance
- CHANGE COLUMN (current column name)(to column name) VARCHAR(25);

CONSTRAINTS

- **NOT NULL:**The NOT NULL constraint enforces a column to NOT accept NULL values.
- **PRIMARY KEY:** The PRIMARY KEY constraint uniquely identifies each record in a table.

Primary keys must contain UNIQUE values, and cannot contain NULL values.

- **FOREIGN KEY:** A FOREIGN KEY is a field (or collection of fields) in one table, that refers to the **PRIMARY KEY** in another table.
- **CHECK:**The CHECK constraint is used to limit the value range that can be placed in a column.
- **DEFAULT:**The DEFAULT constraint is used to set a default value for a column.

The default value will be added to all new records, if no other value is specified

• **UNIQUE:**The UNIQUE constraint ensures that all values in a column are different.

PROCEDURE

RESULTS:

DDL commands have been executed

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OUTPUT

