

Day 6 : 18 Oct 2024 CB FSD - Planning and UI Design

Open the terminal

`sudo mysql -u root -p`

Simplilearn

`show databases;`

syntax to create the database

`create database databasename;`

`create database mydb;`

this command is use to create the mydb database.

`show databases;`

`use databasename;`
database.

this command which help to move inside

`use mydb;`

`show tables;`

this command is use to view all table present in database.

Syntax to create the table

```
create table tableName(columnName datatype,columnName  
datatype.....columnName datatype);
```

data type : data type is a type of data which tell what type of value it can hold.

MySQL Database

varchar(20) : it is use to store alphanumerical value. Max size is 20.

int : it is use to store number without decimal

float : it is use to store with decimal

date: it is use to store date information.

Table name → employee

Id →int, name→varchar, salary→float → column name

```
create table employee(id int, name varchar(25), salary float);
```

create command is part of DDL

DML : Data Manipulation Language

Insert, Delete and Update the records

Insert query :

```
insert into tablename(c1,c2,c3) values(v1,v2,v3);
```

```
insert into employee(id,name,salary) values(1,'Steven',45000);
```

```
insert into tablename values(v1,v2,v3);
```

```
insert into employee values(2,'John',42000);
```

```
insert into employee(id,name) values(3,'Leena');
```

```
insert into employee(name) values('Veeta');
```

```
insert into employee values(4,'Meeta',null)
```

To view the records from table we need to use DRL or DQL

Syntax to retrieve the records

```
select * from tablename;
```

```
select * from employee;
```

retrieve specific column values

```
select columnname,columnname from tableName
```

```
select id,name from employee;
```

```
select name,salary from employee;
```

```
select name from employee;
```

Filter the records with where clause : where clause is use to apply the condition to filter the records.

select * from tableName where columnName OP value;

Operator

1. Conditional operator : > , <, <=, >=, =, !=

select * from employee where id=1;

select * from employee where salary > 44000;

2. In operator : it is use to apply condition with more than one value.

select * from tableName where columnName in(v1,v2,v3);

select * from employee where id in(1,3,10);

select * from employee where name in('Steven','Veena','Ajay');

3. Like operator : it is use to apply or search the value in varchar data types column with conditions. Ex like regular expression.

Select * from employee where name ='steven';

Select * from employee where name like 'steven';

Select * from employee where name like '%a'

The name end with 'a' character

Select * from employee where name = '%a'

Select * from employee where name like 'S%'

The name start with 'S' character

Select * from employee where name like '%ee%';

The name which contains ee character

4. Is null : this operator is use to check null value in particular column.

```
select * from tableName where columnName is null;
```

```
select * from employee where salary is null;
```

5. Logical operator : these operator is use to apply more than one conditions.

and : both condition must be true then only we get the records.

or : any one condition true them we get the records.

```
select * from tablename where columnName op value and/or  
columnName op value
```

```
select * from employee where salary > 40000 and name like  
'S%';
```

```
select * from employee where salary > 40000 or name like 'V%';
```

```
select * from employee where salary > 40000 and name like  
'R%';
```

In DML :

Insert query

Update Query :

Syntax

update tablename set columnname =value;

update employee set salary = 45000;

all employee salary update as 45000

update with where clause

update tablename set columnname = value where clause

update employee set salary = 44000 where id=1;

update employee set salary = 48000 where name like 'John';

update employee set salary = 40000 where salary is null;

update employee set salary = null where id = 4;

Delete query

Syntax

delete from tableName this query delete all records from a table.

delete from employee;

delete with where clause

delete from employee where id=4;

delete from employee where name ='Leena';

DDL:

Create : it is use to create the table

drop table tablename; this command is use to remove table structure including all records. This command is a part of DDL language.

delete from tablename; it remove all records but table structure present in db. This command part of DML language. We can undo those records using TCL command. We can use where clause.

truncate table tableName; it is use to remove all records from a table. But table structure present. This command is part of DDL. We can't undo. We can't use where clause.

DDL command we can't apply undo But DML we can do undo.

alter command : using this command we can add or remove or modify column in existing table.

alter table employee add column desg varchar(2);

alter table employee modify column desg varchar(20);

alter table employee drop column salary;

```
alter table employee rename column desg to designation;
```