

mysql command line client:  
char based.

mysql workbench:  
GUI based.

- when you install mysql database software, the 'root' user is automatically created.
- root user is having database Admini (DBA) privilege  
eg. create new user, drop users, assign permission  
take backups etc

\* To connect to mysql database; -

open mysql workbench

mysql connections (click on + sign to create new connection name :- Test connect" for root user. connection connect" method: standard (TCP/IP)

Host name: server IP address / machine name

Port: 3306 is the standard port number.

(oracle 1521)

username: root

password: (stored in vault - push button) ->

click on it -> cdac

click on ok

- Default schema : schema is a synonym for data

Test connection (push button): click on it.

You will see object Nav. on LHS.

You will see query window at the top

You will see output window



mysql:-

EMP				
EMPNO	ENAME	SAL	CITY	DeptNo.
1	ADAMS	1500	B	10
2	BLAKE	2000	D	10
3	ALLEN	2500	B	20
4	KING	3000	D	30
5	FORD	4000	B	40

• Assumption:

ENAME varchar (20)

select \* from emp where ename > 'A' and ename < 'B'

Blank-Padded comparison semantics:-

- when you compare two strings of diff lengths, the shorter of the two strings is temporarily padded with blank spaces on RH, such that their lengths become equal.

- then mysql will do comparison char by char, based on ASCII value.

wildcards: (Use for pattern matching)

% any chara and any no. of characters

first letter

1) select \* from emp where ename like 'A%';

2) select \* from emp where ename like '%A';

3) select \* from emp where ename like '%A%';

last letter

3) select \* from emp where ename like '%A%';

\* any char or any no. of char

select \* from emp where ename like '---A%';

select \* from emp where ename like '----';

select \* from emp where ename like 'A%';

select \* from emp where sal >= 2000 and sal <= 3000;



## \* Special operators (Like, between)

- select \* from emp where sal between 2000 and 3000;
- select \* from emp where hiredate between '2019-01-01' and '2019-12-31';
- select \* from emp where hiredate bet<sup>n</sup> >= '2019-01-01' and hiredate <= '2019-12-31';
- select \* from emp where deptno = 10 or deptno = 30;
- select \* from emp where deptno in (10, 20, 30);

IN:- performs Logical OR

- select \* from emp where city in ('B', 'P');

## \* Update

- Update emp set sal = 10000 where empno = 1;
- Update emp set sal = 10000, city = 'P' where empno = 1;
- Update emp set sal = 10000 where city = 'B';

- you can update multiple rows and multiple columns simultaneously but you can update only 1 table at a time.

- If you want to update multiple tables, you will have to write a separate update command for each table.

## \* Delete:

- delete from emp where empno = 1; (delete 1 row)
- delete from emp; (delete all rows)

## \* DROP TABLE EMP:-



- You cannot use WHERE condition with DROP table
- if you want to DROP multiple tables, you will have to drop each table separately.
- UPDATE and DELETE command without WHERE clause will not be allowed in MySQL workbench.

### \* Transaction (commit): Processing:

- commit will save all the DML changes since the last committed state
- when the user issues a commit, it is known as End of transaction.
- commit will make the transaction permanent.
- when you issue the commit, depends on logical scope of work.

$$\text{Total work} = T_1 + T_2 + T_3 + \dots + T_n ;$$

### \* Rollback:

- Undo all the DML changes since the last committed state.

only DML commands are affected by Rollback and commit

- when you exit from SQL, the system automatically commit any kind of power failure, n/w failure, system failure, PC reboot, improper exit from SQL etc. your last uncommitted transaction is automatically Rollback

- Any DDL command, the system automatically commit You can rollback to a savepoint.
- commit will save all the DML changes since the last committed state.
- you can rollback sequentially.
- when you commit a rollback, the intermediate savepoints are automatically cleared.