

MYSQL DDL,DML & TCL COMMANDS

DDL Commands:

- Create
- Alter
- Rename
- Drop
- Truncate

DML Commands:

- Insert
- Update
- Delete
- Select

TCL Commands:

- Commit
- Rollback

VIEW ALL DATABASES:

```
mysql> show databases;
```

```
+-----+
| Database          |
+-----+
| employee          |
| information_schema |
| mydp              |
| mysql             |
| performance_schema |
| sakila            |
| sys               |
| world             |
+-----+
```

```
8 rows in set (0.00 sec)
```

SELECT DATABASE:

```
mysql> use mydp;
Database changed
mysql> create table tbl_employee (eid int(5),ename
varchar(20),esalary int(5));
Query OK, 0 rows affected, 2 warnings (0.03 sec)
```

VIEW THE STRUCTURE :

```
mysql> desc tbl_employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| eid   | int           | YES  |     | NULL    |       |
| ename | varchar(20)   | YES  |     | NULL    |       |
| esalary | int          | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

INSERT:

```
mysql> insert into tbl_employee values (101,'aravind',2000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into tbl_employee values (102,'Mandhan',3000);
Query OK, 1 row affected (0.00 sec)
```

FETCHING DATA (SELECT) :

```
mysql> select *from tbl_employee;
+-----+-----+-----+
| eid | ename   | esalary |
+-----+-----+-----+
| 101 | aravind | 2000    |
| 102 | Mandhan | 3000    |
```

```
+-----+-----+-----+
2 rows in set (0.00 sec)
```

INSERTING NULL VALUES:

```
mysql> insert into tbl_employee values (103,null,4000);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into tbl_employee (eid,ename) values
(104,'kumar');
Query OK, 1 row affected (0.00 sec)
```

FETCHING DATA :

```
mysql> select *from tbl_employee;
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 101  | aravind | 2000    |
| 102  | Mandhan | 3000    |
| 103  | NULL    | 4000    |
| 104  | kumar   | NULL    |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

UPDATING RECORD:

```
mysql> update tbl_employee set ename='madhan' where eid=101;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> update tbl_employee set ename='Aravind' where eid=102;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

FETCHING DATA:

```
mysql> select *from tbl_employee;
```

```
+-----+-----+-----+
| eid   | ename   | esalary |
+-----+-----+-----+
| 101   | madhan  | 2000    |
| 102   | Aravind | 3000    |
| 103   | NULL    | 4000    |
| 104   | kumar   | NULL    |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

INSERT USING PARTICULAR COLUMN:

```
mysql> insert into tbl_employee (eid,ename,esalary)
```

```
values(105,'dom',6000),(106,'domnic',7000);
```

```
Query OK, 2 rows affected (0.00 sec)
```

```
Records: 2  Duplicates: 0  Warnings: 0
```

FETCHING DATA:

```
mysql> select *from tbl_employee;
```

```
+-----+-----+-----+
| eid   | ename   | esalary |
+-----+-----+-----+
| 101   | madhan  | 2000    |
| 102   | Aravind | 3000    |
| 103   | NULL    | 4000    |
| 104   | kumar   | NULL    |
| 105   | dom     | 6000    |
| 106   | domnic  | 7000    |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

FETCHING PARTICULAR COLUMN:

```
mysql> select eid,esalary from tbl_employee;
```

```
+-----+-----+
| eid  | esalary |
+-----+-----+
| 101  | 2000   |
| 102  | 3000   |
| 103  | 4000   |
| 104  | NULL   |
| 105  | 6000   |
| 106  | 7000   |
+-----+-----+
6 rows in set (0.00 sec)
```

FETCHING DATA BASED ON CONDITION:

```
mysql> select * from tbl_employee where esalary>2000;
```

```
+-----+-----+-----+
| eid  | ename   | esalary |
+-----+-----+-----+
| 102  | Aravind | 3000   |
| 103  | NULL    | 4000   |
| 105  | dom     | 6000   |
| 106  | domnic  | 7000   |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select *from tbl_employee where ename='Aravind';
```

```
+-----+-----+-----+
| eid  | ename   | esalary |
+-----+-----+-----+
| 102  | Aravind | 3000   |
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> select *from tbl_employee where ename!='Aravind';
```

```
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 101  | madhan | 2000    |
| 104  | kumar  | NULL    |
| 105  | dom    | 6000    |
| 106  | domnic | 7000    |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

COMPARING NULL VALUES:(is null,is not null)

```
mysql> select *from tbl_employee where ename is null;
```

```
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 103  | NULL   | 4000    |
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> select *from tbl_employee where ename is not null;
```

```
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 101  | madhan | 2000    |
| 102  | Aravind | 3000    |
| 104  | kumar  | NULL    |
| 105  | dom    | 6000    |
| 106  | domnic | 7000    |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

AND OPERATOR :

```
mysql> select *from tbl_employee where ename is not null and  
esalary=3000;
```

```
+-----+-----+-----+  
| eid  | ename   | esalary |  
+-----+-----+-----+  
| 102  | Aravind | 3000    |  
+-----+-----+-----+  
1 row in set (0.00 sec)
```

OR OPERATOR:

```
mysql> select *from tbl_employee where ename is not null or  
esalary=3000;
```

```
+-----+-----+-----+  
| eid  | ename   | esalary |  
+-----+-----+-----+  
| 101  | madhan  | 2000    |  
| 102  | Aravind | 3000    |  
| 104  | kumar   | NULL    |  
| 105  | dom     | 6000    |  
| 106  | domnic  | 7000    |  
+-----+-----+-----+  
5 rows in set (0.00 sec)
```

IN OPERATOR:

```
mysql> select *from tbl_employee where eid in(101,102,106);
```

```
+-----+-----+-----+  
| eid  | ename   | esalary |  
+-----+-----+-----+  
| 101  | madhan  | 2000    |  
| 102  | Aravind | 3000    |  
| 106  | domnic  | 7000    |  
+-----+-----+-----+
```

3 rows in set (0.00 sec)

NOT IN OPERATOR:

```
mysql> select *from tbl_employee where eid not in(101,102,106);
```

eid	ename	esalary
103	NULL	4000
104	kumar	NULL
105	dom	6000

3 rows in set (0.00 sec)

BETWEEN :

```
mysql> select *from tbl_employee where esalary between 2000 and 4000;
```

eid	ename	esalary
101	madhan	2000
102	Aravind	3000
103	NULL	4000

3 rows in set (0.00 sec)

NOT BETWEEN:

```
mysql> select *from tbl_employee where esalary not between 2000 and 4000;
```

eid	ename	esalary
105	dom	6000
106	domnic	7000

2 rows in set (0.00 sec)

LIKE OPERATOR:

```
mysql> select * from tbl_employee where ename like 'p%';
Empty set (0.00 sec)
mysql> select * from tbl_employee where ename like 'a%';
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 102  | Aravind | 3000    |
+-----+-----+-----+
1 row in set (0.00 sec)
```

NOT LIKE OPERATOR:

```
mysql> select * from tbl_employee where ename like '_o%';
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 105  | dom    | 6000    |
| 106  | domnic | 7000    |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

SAVE TRANSACTION (COMMIT):

```
mysql> COMMIT;
Query OK, 0 rows affected (0.00 sec)

mysql> update tbl_employee set esalary=0;
Query OK, 6 rows affected (0.00 sec)
Rows matched: 6  Changed: 6  Warnings: 0
```

```
mysql> select *from tbl_employee;
+-----+-----+-----+
| eid  | ename  | esalary |
+-----+-----+-----+
| 101  | madhan | 0        |
+-----+-----+-----+
```

102	Aravind	0
103	NULL	0
104	kumar	0
105	dom	0
106	domnic	0

6 rows in set (0.00 sec)

CHECKING AUTOCOMMIT IS TRUE OR FALSE

```
mysql> select @@autocommit from dual;
+-----+
| @@autocommit |
+-----+
| 1 |
+-----+
1 row in set (0.00 sec)
```

SET AUTOCOMMIT IS FALSE:

```
mysql> set autocommit=0;
Query OK, 0 rows affected (0.00 sec)

mysql> select @@autocommit from dual;
+-----+
| @@autocommit |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)
```

UPDATE TABLE VALUE:

```
mysql> update tbl_employee set esalary=1000 where eid=101;
Query OK, 1 row affected (0.00 sec)
```

Rows matched: 1 Changed: 1 Warnings: 0

FETCHING DATA:

```
mysql> select *from tbl_employee;
```

eid	ename	esalary
101	madhan	1000
102	Aravind	0
103	NULL	0
104	kumar	0
105	dom	0
106	domnic	0

6 rows in set (0.00 sec)

ROLLBACK:

```
mysql> rollback;
```

Query OK, 0 rows affected (0.00 sec)

FETCHING DATA:

```
mysql> select *from tbl_employee;
```

eid	ename	esalary
101	madhan	0
102	Aravind	0
103	NULL	0
104	kumar	0
105	dom	0
106	domnic	0

6 rows in set (0.00 sec)

UPDATE TABLE VALUE:

```
mysql> update tbl_employee set esalary=2000;
Query OK, 6 rows affected (0.00 sec)
Rows matched: 6  Changed: 6  Warnings: 0
```

```
mysql> select *from tbl_employee;
```

```
+-----+-----+-----+
| eid   | ename   | esalary |
+-----+-----+-----+
| 101   | madhan  | 2000   |
| 102   | Aravind | 2000   |
| 103   | NULL    | 2000   |
| 104   | kumar   | 2000   |
| 105   | dom     | 2000   |
| 106   | domnic  | 2000   |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

SAVE (COMMIT):

```
mysql> commit;
Query OK, 0 rows affected (0.00 sec)
```

ROLLBACK:

```
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select *from tbl_employee;
```

```
+-----+-----+-----+
| eid   | ename   | esalary |
+-----+-----+-----+
| 101   | madhan  | 2000   |
| 102   | Aravind | 2000   |
| 103   | NULL    | 2000   |
| 104   | kumar   | 2000   |
| 105   | dom     | 2000   |
| 106   | domnic  | 2000   |
+-----+-----+-----+
```

6 rows in set (0.00 sec)

UPDATE :

```
mysql> update tbl_employee set ename=null,esalary =0 where eid
in(101,103,106);
```

Query OK, 3 rows affected (0.00 sec)

Rows matched: 3 Changed: 3 Warnings: 0

```
mysql> select *from tbl_employee;
```

eid	ename	esalary
101	NULL	0
102	Aravind	2000
103	NULL	0
104	kumar	2000
105	dom	2000
106	NULL	0

6 rows in set (0.00 sec)

DELETE:

```
mysql> DELETE FROM tbl_employee;
```

Query OK, 6 rows affected (0.00 sec)

```
mysql> select *from tbl_employee;
```

Empty set (0.00 sec)

ROLLBACK:

```
mysql> ROLLBACK;
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select *from tbl_employee;
```

```
+-----+-----+-----+
| eid   |  ename   |  esalary |
+-----+-----+-----+
|  101  | madhan   |    2000 |
|  102  | Aravind  |    2000 |
|  103  | NULL     |    2000 |
|  104  | kumar    |    2000 |
|  105  | dom      |    2000 |
|  106  | domnic   |    2000 |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

ORDER BY (DEFAULT ASCENDING):

```
mysql> select *from tbl_employee order by ename;
```

```
+-----+-----+-----+
| eid   |  ename   |  esalary |
+-----+-----+-----+
|  103  | NULL     |    2000 |
|  102  | Aravind  |    2000 |
|  105  | dom      |    2000 |
|  106  | domnic   |    2000 |
|  104  | kumar    |    2000 |
|  101  | madhan   |    2000 |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

ORDER BY (DESC FOR DESCENDING):

```
mysql> select *from tbl_employee order by ename desc;
```

eid	ename	esalary
101	madhan	2000
104	kumar	2000
106	domnic	2000
105	dom	2000
102	Aravind	2000
103	NULL	2000

6 rows in set (0.00 sec)

Is null operator:

```
mysql> select * from tbl_employee where ename <=>null;
```

eid	ename	esalary
103	NULL	2000

1 row in set (0.00 sec)