Name :Kape Ishwari Nanasaheb

Roll NO:142

Div :A

Batch :AS4

Assignment No 1

- **create database or use existing database**

mysql> use student142;

Database changed

mysql> show tables;

Empty set (0.05 sec)

- **show structure of database**

mysql> desc emp;

```
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| eno      | int(11)     | YES  |     | NULL    |       |
| ename    | varchar(25) | YES  |     | NULL    |       |
| eaddress | varchar(25) | YES  |     | NULL    |       |
| esal     | decimal(6,2)| YES  |     | NULL    |       |
| deptno   | int(11)     | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
```

5 rows in set (0.02 sec)

- **Insert value in employee table**

mysql> insert into emp values(101,'Sachin','Mumbai',5647.23,2);

Query OK, 1 row affected (0.06 sec)

mysql> insert into emp values(102,'Vinod','Banglore',3457.23,5);

Query OK, 1 row affected (0.09 sec)

mysql> insert into emp values(104,'John','Pune',7623.65,3);

Query OK, 1 row affected (0.09 sec)

mysql> insert into emp values(103,'Julie','Nashik',5323.65,2);

Query OK, 1 row affected (0.08 sec)

mysql> insert into emp values(106,'Apurva','Indore',6723.64,4);

Query OK, 1 row affected (0.06 sec)

- **show table of employee record**

mysql> select * from emp;

```
+------+--------+----------+---------+--------+
| eno  | ename  | eaddress | esal    | deptno |
+------+--------+----------+---------+--------+
|  101 | Sachin | Mumbai   | 5647.23 |      2 |
|  102 | Vinod  | Banglore | 3457.23 |      5 |
|  104 | John   | Pune     | 7623.65 |      3 |
|  103 | Julie  | Nashik   | 5323.65 |      2 |
```

| 106 | Apurva | Indore | 6723.64 | 4 |

+------+--------+----------+---------+--------+

5 rows in set (0.00 sec)

DDL COMMANDS

1)Alter table: add

used to add new column name in table
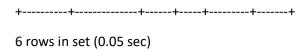
mysql> alter table emp add dname int;

Query OK, 5 rows affected (0.45 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> desc emp;

+----------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+--------------+------+-----+---------+-------+

| eno | int(11) | YES | | NULL | |

| ename | varchar(25) | YES | | NULL | |

| eaddress | varchar(25) | YES | | NULL | |

| esal | decimal(6,2) | YES | | NULL | |

| deptno | int(11) | YES | | NULL | |

| dname | int(11) | YES | | NULL | |

```
+----------+--------------+------+-----+---------+-------+
```

6 rows in set (0.05 sec)

2)Alter table: modify

used to modify size of column

mysql> alter table emp modify esal decimal(7,2);

Query OK, 5 rows affected (0.60 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> desc emp;

```
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| eno      | int(11)      | YES  |     | NULL    |       |
| ename    | varchar(25)  | YES  |     | NULL    |       |
| eaddress | varchar(25)  | YES  |     | NULL    |       |
| esal     | decimal(7,2) | YES  |     | NULL    |       |
| deptno   | int(11)      | YES  |     | NULL    |       |
| dname    | int(11)      | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
```

6 rows in set (0.11 sec)

before salary column size is(6,2)

after modify it is (7,2)

3)Alter table:drop

used to delete the column in table

mysql> alter table emp drop dname;

Query OK, 5 rows affected (0.69 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> desc emp;

```
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| eno      | int(11)     | YES  |     | NULL    |       |
| ename    | varchar(25) | YES  |     | NULL    |       |
| eaddress | varchar(25) | YES  |     | NULL    |       |
| esal     | decimal(7,2)| YES  |     | NULL    |       |
| deptno   | int(11)     | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
```

5 rows in set (0.08 sec)

after drop command dname column deleted.

4)truncate

used to delete all the rows/record from table

mysql> select * from emp1;

```
+------+--------+--------+
| eno  | ename  | deptno |
+------+--------+--------+
| 102  | john   |    23  |
| 104  | vinod  |     2  |
| 103  | sachin |     5  |
| 106  | vijay  |    15  |
+------+--------+--------+
```

4 rows in set (0.00 sec)

mysql> truncate table emp1;

Query OK, 0 rows affected (0.08 sec)

mysql> select * from emp1;

Empty set (0.00 sec)

mysql> desc emp1;

+--------+-------------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
eno	int(11)	YES		NULL	
ename	varchar(25)	YES		NULL	
deptno	int(11)	YES		NULL	
+--------+-------------+------+-----+---------+-------+

3 rows in set (0.05 sec)

Here all records are get deleted but structure remains same

5)drop command

used to delete all records as well as structure

mysql> drop table emp1;

Query OK, 0 rows affected (0.37 sec)

mysql> select * from emp1;

ERROR 1146 (42S02): Table 'student142.emp1' doesn't exist

mysql> desc emp1;

ERROR 1146 (42S02): Table 'student142.emp1' doesn't exist

mysql>

- **View**

mysql> select * from emp;

```
+------+--------+----------+---------+--------+
| eno  | ename  | eaddress | esal    | deptno |
+------+--------+----------+---------+--------+
|  101 | Sachin | Mumbai   | 5647.23 |      2 |
|  102 | Vinod  | Banglore | 3457.23 |      5 |
|  104 | John   | Pune     | 7623.65 |      3 |
|  103 | Julie  | Nashik   | 5323.65 |      2 |
|  106 | Apurva | Indore   | 6723.64 |      4 |
+------+--------+----------+---------+--------+
5 rows in set (0.12 sec)
```

mysql> create view emp_view as select eno,ename,esal from emp;

Query OK, 0 rows affected (0.09 sec)

mysql> select * from emp_view;

```
+------+--------+---------+
| eno  | ename  | esal    |
+------+--------+---------+
|  101 | Sachin | 5647.23 |
|  102 | Vinod  | 3457.23 |
```

| 104 | John | 7623.65 |

| 103 | Julie | 5323.65 |

| 106 | Apurva | 6723.64 |

+------+--------+---------+

5 rows in set (0.03 sec)

Here view is created for eno,ename,esal

1.update in view

when we update virtual table then it will also update in original table

mysql> update emp_view set ename='ramesh' where eno=101;

Query OK, 1 row affected (0.08 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from emp_view;

+------+--------+---------+

| eno | ename | esal |

+------+--------+---------+

| 101 | **ramesh** | 5647.23 |

| 102 | Vinod | 3457.23 |

| 104 | John | 7623.65 |

| 103 | Julie | 5323.65 |

| 106 | Apurva | 6723.64 |

+------+--------+---------+

5 rows in set (0.00 sec)

mysql> select * from emp;

```
+------+--------+----------+---------+--------+
| eno  | ename  | eaddress | esal    | deptno |
+------+--------+----------+---------+--------+
|  101 | ramesh | Mumbai   | 5647.23 |      2 |
|  102 | Vinod  | Banglore | 3457.23 |      5 |
|  104 | John   | Pune     | 7623.65 |      3 |
|  103 | Julie  | Nashik   | 5323.65 |      2 |
|  106 | Apurva | Indore   | 6723.64 |      4 |
+------+--------+----------+---------+--------+
```

5 rows in set (0.00 sec)

2.Delete from view

mysql> delete from emp_view where eno=101;
Query OK, 1 row affected (0.40 sec)

mysql> select * from emp_view;

```
+------+--------+---------+
| eno  | ename  | esal    |
+------+--------+---------+
|  102 | Vinod  | 3457.23 |
|  104 | John   | 7623.65 |
|  103 | Julie  | 5323.65 |
|  106 | Apurva | 6723.64 |
+------+--------+---------+
```

4 rows in set (0.00 sec)

mysql> select * from emp;

```
+------+--------+----------+---------+--------+
| eno  | ename  | eaddress | esal    | deptno |
+------+--------+----------+---------+--------+
|  102 | Vinod  | Banglore | 3457.23 |      5 |
|  104 | John   | Pune     | 7623.65 |      3 |
|  103 | Julie  | Nashik   | 5323.65 |      2 |
|  106 | Apurva | Indore   | 6723.64 |      4 |
+------+--------+----------+---------+--------+
```

4 rows in set (0.00 sec)

3.Insert in view

mysql> insert into emp_view values(107,'ajay',5643.77);
Query OK, 1 row affected (0.06 sec)

mysql> select * from emp_view;

```
+------+--------+---------+
| eno  | ename  | esal    |
+------+--------+---------+
|  102 | Vinod  | 3457.23 |
|  104 | John   | 7623.65 |
|  103 | Julie  | 5323.65 |
|  106 | Apurva | 6723.64 |
|  107 | ajay   | 5643.77 |
+------+--------+---------+
```

5 rows in set (0.00 sec)

mysql> select * from emp;

```
+------+--------+----------+---------+--------+
| eno  | ename  | eaddress | esal    | deptno |
+------+--------+----------+---------+--------+
|  102 | Vinod  | Banglore | 3457.23 |      5 |
|  104 | John   | Pune     | 7623.65 |      3 |
|  103 | Julie  | Nashik   | 5323.65 |      2 |
|  106 | Apurva | Indore   | 6723.64 |      4 |
|  107 | ajay   | NULL     | 5643.77 |   NULL |
+------+--------+----------+---------+--------+
```

5 rows in set (0.00 sec)

4.update in view

mysql> update emp_view set ename='abc' where eno=102;

Query OK, 1 row affected (0.06 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from emp_view;

```
+------+--------+---------+
| eno  | ename  | esal    |
```

```
+------+--------+---------+
| 102  | abc    | 3457.23 |
| 104  | John   | 7623.65 |
| 103  | Julie  | 5323.65 |
| 106  | Apurva | 6723.64 |
| 107  | ajay   | 5643.77 |
+------+--------+---------+
5 rows in set (0.00 sec)
```

6.drop view

mysql> drop view emp_view;

Query OK, 0 rows affected (0.00 sec)

mysql> select * from emp_view;

ERROR 1146 (42S02): Table 'student142.emp_view' doesn't exist

- **INDEX**

1.Create index

mysql> create unique index emp_index on emp(eno);

Query OK, 0 rows affected (0.27 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from emp;

```
+-------+------------+----------+-------------+------------+----------+-------------+----------+--------+------+-----------+---------+---------------+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-------+------------+----------+-------------+------------+----------+-------------+----------+--------+------+-----------+---------+---------------+
| emp   |          0 | emp_index |           1 | eno        | A        |           5 | NULL     | NULL   | YES  | BTREE     |         |               |
| emp   |          1 | eid       |           1 | eno        | A        |           5 | NULL     | NULL   | YES  | BTREE     |         |               |
| emp   |          1 | eno       |           1 | eno        | A        |           5 | NULL     | NULL   | YES  | BTREE     |         |               |
+-------+------------+----------+-------------+------------+----------+-------------+----------+--------+------+-----------+---------+---------------+
```

3 rows in set (0.05 sec)

2.Drop index

mysql> drop index emp_index on emp;

Query OK, 0 rows affected (0.16 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from emp;

```
+-------+------------+----------+-------------+------------+----------+-------------+----------+--------+------+-----------+---------+---------------+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-------+------------+----------+-------------+------------+----------+-------------+----------+--------+------+-----------+---------+---------------+
| emp   |          1 | eid      |           1 | eno        | A        |           5 | NULL     | NULL   | YES  | BTREE     |         |               |
| emp   |          1 | eno      |           1 | eno        | A        |           5 | NULL     | NULL   | YES  | BTREE     |         |               |
```

```
+-------+-----------+---------+-------------+------------+----------+------------+----------+--------+-----+-----------+--------+----------------+
```

2 rows in set (0.00 sec)