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Roll No:153

Div:A

Batch: AS4

Assignment No 1

Aim: Study of open source relational database management system: MySQL

• Create database or use existing database

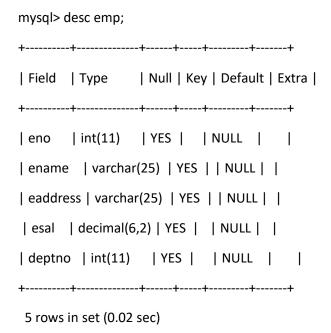
```
mysql> use student153;

Database changed

mysql> show tables;

Empty set (0.05 sec)
```

show structure of database



• 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)

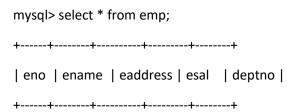
mysql> insert into emp values(103,'Julie','Nashik',5323.65,2);

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



```
| 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 |
+----+
     | int(11) | YES | NULL | |
| eno
ename | varchar(25) | YES | NULL |
| eaddress | varchar(25) | YES | NULL | |
| esal | decimal(6,2) | YES | | NULL | |
 deptno int(11)
                         | | NULL
                                  Ε
                         S
```

1)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 | l 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)

2)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;

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 'student153.emp1' doesn't exist mysql> desc emp1;
ERROR 1146 (42S02): Table 'student153.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)
```

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)
 1.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 |
```

+----+

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 |
| 107 | ajay | NULL | 5643.77 | NULL |
+----+-----+-----+
5 rows in set (0.00 sec)
```

1.update in view

```
+----+
| 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 No Index_type	_			_	Colu	ımn_naı	me Collation	Cardinality Su	b_par	t Pac	ked N	Null
+	+	+	+	+-		+	++-	+	+		· +	
+												
								NULL YES BT				
emp	1 eid	1	1 eno	A		5	NULL NULL	YES BTREE				
emp	1 eno	1	1 eno	A	1	5	NULL NULL	. YES BTREE		1		
++ +		+		+-		+	++-	+	+		+	
3 rows in se	t (0.05 sec))										
2.Drop ind	ex											
mysql> drop	index emp	_index o	n emp;									
Query OK, 0 i	rows affect	ed (0.16	sec)									
Records: 0 D	uplicates: () Warnii	ngs: 0									
mysql> show	w index fro	m emp;										
+	+	+	+	+		+	+	+	+			
-+												
Table No Index_type		–		_	Colu	mn_nan	ne Collation	Cardinality Sub	o_part	Pacl	ked N	lull
+		+		+		+	++	+	+			
emp	1 eid	1	1 eno	A	ı	5	NULL NULL	YES BTREE	I	I		
emp	1 eno	I	1 eno	A	1	5	NULL NULL	YES BTREE	1	1	ļ	

+-----+

2 rows in set (0.00 sec)