

ADVANCED DATABASE MANAGEMENT SYSTEM**Experiment No: 3****Aim**

To familiarize DDL Commands-

Question

1.Create a table emp with attributes empno number(4)as primary key, ename char(10),hiredate, salary, commission

insert 5 rows of data

101	Ramesh	17-Jan 1980	5000	
102	Ajay	05-Jul 1985	5000	500
103	Ravi	12-Aug 1981	1500	
104	Nikesh	03-Mar 1983	3000	700
105	Ravi	05-jul 1985	3000	

2.Modifying the structure of tables

a.Add new columns: sal number(7,2)

b.Dropping a column from a table: sal

c.Modifying existing column :ename varchar2(15)

d.Renaming the tables: emp to emp1

e.truncating the tables:emp1

f.Destroying tables:emp

Name:Melbin MP

Roll No: 19

Batch: MCA-B

Date: 08/4/2022

Procedure

```
CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) NOT NULL ,HIREDATE VARCHAR(10),SALARY VARCHAR(10), COMMISSION VARCHAR(10));
```

```
INSERT INTO EMP VALUES('101','RAMESH','17-JAN-80','5000','0');
```

```
INSERT INTO EMP VALUES('102', 'Ajay', '05-Jul-85','5000','500');
```

```
INSERT INTO EMP VALUES('103','RAVI','12-08-81','1500','0');
```

```
INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700');
```

```
INSERT INTO EMP VALUES("105",'Ravi','1985-07-05',3000,'0');
```

```
ALTER TABLE EMP ADD SAL int;
```

```
ALTER TABLE EMP DROP COLUMN SAL;
```

```
ALTER TABLE EMP MODIFY EMPNAME VARCHAR(15);
```

```
RENAME table EMP to emp1;
```

```
TRUNCATE TABLE emp1;
```

```
DROP TABLE emp1;
```

Output Screenshot

1.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'employee' selected. The main editor shows the SQL command to create the 'EMP' table:

```
CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) NOT NULL ,HIREDATE VARCHAR(10),SALARY VARCHAR(10), COMMISSION VARCHAR(10));
```

The 'Output' tab at the bottom shows the execution results:

#	Time	Action	Message	Duration / Fetch
31	10:09:10	SELECT * from customer join borrow on customer.cname=borrow.cname join deposit on dep...	1 row(s) returned	0.000 sec / 0.000 sec
32	10:13:26	SELECT ACTNO,AMOUNT FROM DEPOSIT WHERE ADATE BETWEEN '1995-DEC-17' ...	0 row(s) returned	0.000 sec / 0.000 sec
33	10:15:15	SELECT ACTNO,AMOUNT FROM DEPOSIT WHERE ADATE BETWEEN '17-DEC-1995' ...	4 row(s) returned	0.000 sec / 0.000 sec
34	10:58:45	Apply changes to employee	Changes applied	
35	11:04:04	CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) N...	0 row(s) affected	0.454 sec
36	11:05:11	CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) N...	0 row(s) affected	0.266 sec

The screenshot shows the MySQL Workbench interface with the 'EMP' table created. The SQL editor contains the following commands:

```
1 CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) NOT NULL ,HIREDATE VARCHAR(10),SALARY VARCHAR(10), COMMISSION VARCHAR(10));
2 INSERT INTO EMP VALUES('101','RAMESH','17-JAN-80','5000','0');
3 INSERT INTO EMP VALUES('102','Ajay','05-Jul-85','5000','500');
4 INSERT INTO EMP VALUES('103','RAVI','12-08-81','1500','0');
5 INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700');
6 INSERT INTO EMP VALUES('105','Ravi','1985-07-05','3000','0');
7 SELECT * FROM EMP;
```

The 'Result Grid' shows the data inserted into the 'EMP' table:

EMPNO	EMPNAME	HIREDATE	SALARY	COMMISSION
101	RAMESH	17-JAN-80	5000	0
102	Ajay	05-Jul-85	5000	500
103	RAVI	12-08-81	1500	0
104	Nikesh	03-03-83	3000	700
105	Ravi	1985-07-05	3000	0

The 'Output' tab shows the execution results for the insert and select statements:

#	Time	Action	Message	Duration / Fetch
44	11:17:41	INSERT INTO EMP VALUES('102','Ajay','05-Jul-85','5000','500')	1 row(s) affected	0.078 sec
45	11:21:09	INSERT INTO EMP VALUES('103','RAVI','12-08-81','1500')	Error Code: 1136. Column count doesn't match value count at row 1	0.000 sec
46	11:22:12	INSERT INTO EMP VALUES('103','RAVI','12-08-81','1500','0')	1 row(s) affected	0.047 sec
47	11:22:12	INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700')	1 row(s) affected	0.047 sec
48	11:25:30	INSERT INTO EMP VALUES('105','Ravi','1985-07-05','3000','0')	1 row(s) affected	0.047 sec
49	11:26:16	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

2 (A)

MySQL Workbench interface showing the 'employee' schema. The SQL editor contains the following queries:

```

3 • INSERT INTO EMP VALUES('102', 'Ajay', '05-Jul-85', '5000', '500');
4 • INSERT INTO EMP VALUES('103', 'RAVI', '12-08-81', '1500', '0');
5 • INSERT INTO EMP VALUES('104', 'Nikesh', '03-03-83', '3000', '700');
6 • INSERT INTO EMP VALUES('105', 'Ravi', '1985-07-05', '3000', '0');
7 • SELECT * FROM EMP;
8 • ALTER TABLE emp ADD sal int;
9 • SELECT * FROM EMP;

```

The Result Grid shows the following data:

EMPNO	EMPNAME	HIREDATE	SALARY	COMMISSION	sal
101	RAMESH	17-JAN-80	5000	0	NULL
102	Ajay	05-Jul-85	5000	500	NULL
103	RAVI	12-08-81	1500	0	NULL
104	Nikesh	03-03-83	3000	700	NULL
105	Ravi	1985-07-05	3000	0	NULL
NULL	NULL	NULL	NULL	NULL	NULL

The Output window shows the execution results of the queries:

#	Time	Action	Message	Duration / Fetch
47	11:22:12	INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700')	1 row(s) affected	0.047 sec
48	11:25:30	INSERT INTO EMP VALUES('105','Ravi','1985-07-05','3000','0')	1 row(s) affected	0.047 sec
49	11:26:16	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
50	11:28:22	CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY, EMPNAME VARCHAR(10) N...	Error Code: 1050. Table 'emp' already exists	0.000 sec
51	11:28:50	ALTER TABLE emp ADD sal int	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.859 sec
52	11:29:13	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

1 (B)

MySQL Workbench interface showing the 'employee' schema. The SQL editor contains the following queries:

```

5 • INSERT INTO EMP VALUES('104', 'Nikesh', '03-03-83', '3000', '700');
6 • INSERT INTO EMP VALUES('105', 'Ravi', '1985-07-05', '3000', '0');
7 • SELECT * FROM EMP;
8 • ALTER TABLE emp ADD sal int;
9 • SELECT * FROM EMP;
10 • ALTER TABLE emp DROP COLUMN sal;
11 • SELECT * FROM EMP;

```

The Result Grid shows the following data:

EMPNO	EMPNAME	HIREDATE	SALARY	COMMISSION
101	RAMESH	17-JAN-80	5000	0
102	Ajay	05-Jul-85	5000	500
103	RAVI	12-08-81	1500	0
104	Nikesh	03-03-83	3000	700
105	Ravi	1985-07-05	3000	0
NULL	NULL	NULL	NULL	NULL

The Output window shows the execution results of the queries:

#	Time	Action	Message	Duration / Fetch
49	11:26:16	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
50	11:28:22	CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY, EMPNAME VARCHAR(10) N...	Error Code: 1050. Table 'emp' already exists	0.000 sec
51	11:28:50	ALTER TABLE emp ADD sal int	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.859 sec
52	11:29:13	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
53	11:30:40	ALTER TABLE emp DROP COLUMN sal	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.125 sec
54	11:31:08	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

1 (C)

MySQL Workbench interface showing the 'employee' schema. The SQL editor contains the following queries:

```

1 CREATE TABLE EMP(EMPNO VARCHAR(4) PRIMARY KEY ,EMPNAME VARCHAR(10) NOT NULL ,HIREDATE VARCHAR(10),SALARY VARCHAR(10), COMMISSION VARCHAR(10));
2 INSERT INTO EMP VALUES('101','RAMESH','17-JAN-80','5000','0');
3 INSERT INTO EMP VALUES('102','Ajay','05-Jul-85','5000','500');
4 INSERT INTO EMP VALUES('103','RAVI','12-08-81','1500','0');
5 INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700');
6 INSERT INTO EMP VALUES('105','Ravi','1985-07-05','3000','0');
7 SELECT * FROM EMP;
8 ALTER TABLE emp ADD sal int;
9 SELECT * FROM EMP;
10 ALTER TABLE emp DROP COLUMN sal;
11 SELECT * FROM EMP;
12 ALTER TABLE emp MODIFY EMPNAME VARCHAR(15);

```

The Output window shows the execution results:

#	Time	Action	Message	Duration / Fetch
51	11:28:50	ALTER TABLE emp ADD sal int	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.859 sec
52	11:29:13	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000
53	11:30:40	ALTER TABLE emp DROP COLUMN sal	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.125 sec
54	11:31:08	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000
55	11:31:51	ALTER TABLE emp MODIFY ename VARCHAR(15)	Error Code: 1054. Unknown column 'ename' in 'emp'	0.000 sec
56	11:32:37	ALTER TABLE emp MODIFY EMPNAME VARCHAR(15)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.234 sec

1 (D)

MySQL Workbench interface showing the 'employee' schema. The SQL editor contains the following queries:

```

8 ALTER TABLE emp ADD sal int;
9 SELECT * FROM EMP;
10 ALTER TABLE emp DROP COLUMN sal;
11 SELECT * FROM EMP;
12 ALTER TABLE emp MODIFY EMPNAME VARCHAR(15);
13 RENAME table emp to emp1;
14 SELECT * FROM EMP1;

```

The Result Grid shows the data for the 'EMP' table:

EMPNO	EMPNAME	HIREDATE	SALARY	COMMISSION
101	RAMESH	17-JAN-80	5000	0
102	Ajay	05-Jul-85	5000	500
103	RAVI	12-08-81	1500	0
104	Nikesh	03-03-83	3000	700
105	Ravi	1985-07-05	3000	0

The Output window shows the execution results:

#	Time	Action	Message	Duration / Fetch
53	11:30:40	ALTER TABLE emp DROP COLUMN sal	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.125 sec
54	11:31:08	SELECT * FROM EMP LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
55	11:31:51	ALTER TABLE emp MODIFY ename VARCHAR(15)	Error Code: 1054. Unknown column 'ename' in 'emp'	0.000 sec
56	11:32:37	ALTER TABLE emp MODIFY EMPNAME VARCHAR(15)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.234 sec
57	11:34:02	RENAME table emp to emp1	0 row(s) affected	0.469 sec
58	11:34:27	SELECT * FROM EMP1 LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

1(E)

MySQL Workbench interface showing the execution of SQL queries on the 'employee' schema. The SQL Editor contains the following queries:

```

8 • ALTER TABLE emp ADD sal int;
9 • SELECT * FROM EMP;
10 • ALTER TABLE emp DROP COLUMN sal;
11 • SELECT * FROM EMP;
12 • ALTER TABLE emp MODIFY EMPNAME VARCHAR(15);
13 • RENAME table emp to emp1;
14 • SELECT * FROM EMP1;

```

The Output window displays the Action Output for these queries:

#	Time	Action	Message	Duration / Fetch
55	11:31:51	ALTER TABLE emp MODIFY ename VARCHAR(15)	Error Code: 1054. Unknown column 'ename' in 'emp'	0.000 sec
56	11:32:37	ALTER TABLE emp MODIFY EMPNAME VARCHAR(15)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.234 sec
57	11:34:02	RENAME table emp to emp1	0 row(s) affected	0.469 sec
58	11:34:27	SELECT * FROM EMP1 LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000
59	11:35:23	TRUNCATE TABLE emp1	0 row(s) affected	0.703 sec
60	11:35:31	SELECT * FROM EMP1 LIMIT 0, 1000	0 row(s) returned	0.031 sec / 0.000

1 (F)

MySQL Workbench interface showing the execution of SQL queries on the 'employee' schema. The SQL Editor contains the following queries:

```

5 • INSERT INTO EMP VALUES('104','Nikesh','03-03-83','3000','700');
6 • INSERT INTO EMP VALUES('105','Ravi','1985-07-05',3000,'0');
7 • SELECT * FROM EMP;
8 • ALTER TABLE emp ADD sal int;
9 • SELECT * FROM EMP;
10 • ALTER TABLE emp DROP COLUMN sal;
11 • SELECT * FROM EMP;
12 • ALTER TABLE emp MODIFY EMPNAME VARCHAR(15);
13 • RENAME table emp to emp1;
14 • SELECT * FROM EMP1;
15 • TRUNCATE TABLE emp1;
16 • DROP TABLE emp1;

```

The Output window displays the Action Output for these queries:

#	Time	Action	Message	Duration / Fetch
56	11:32:37	ALTER TABLE emp MODIFY EMPNAME VARCHAR(15)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	1.234 sec
57	11:34:02	RENAME table emp to emp1	0 row(s) affected	0.469 sec
58	11:34:27	SELECT * FROM EMP1 LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000
59	11:35:23	TRUNCATE TABLE emp1	0 row(s) affected	0.703 sec
60	11:35:31	SELECT * FROM EMP1 LIMIT 0, 1000	0 row(s) returned	0.031 sec / 0.000
61	11:36:11	DROP TABLE emp1	0 row(s) affected	0.500 sec