DBMS LAB ASSIGNMENT 8

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1. Create a table called Employee with the following structure

Name	Type
Empno	Number
Ename	Varchar2(20)
Job	Varchar2(20)
Mgr	Number
Sal	Number
Commission	Number

	Empno	Ename	Job	Mgr	Sal
▶	45	John	cheif	500	600000
	93	smith	manager	278	500000
	28	david	hr	589	400000
	64	natasha	developer	190	300000
	79	stark	clerk	732	200000

a. Insert the any three records in the employee table and use rollback and check the result.

```
BEGIN;
insert into Employee(Empno,Ename,Job,Mgr,Sal)
VALUES
("37","steve","clerk","395",268405),
("89","micheal","accountant","993",251503),
("23","tony","manager","877",76258);
ROLLBACK;
```

Before Roll back:

Empno	Ename	Job	Mgr	Sal
45	John	cheif	500	600000
93	smith	manager	278	500000
28	david	hr	589	400000
64	natasha	developer	190	300000
79	stark	clerk	732	200000
37	steve	clerk	395	268405
89	micheal	accountant	993	251503
23	tony	manager	877	76258

After Roll back:

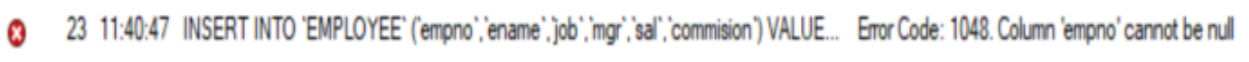
Empno	Ename	Job	Mgr	Sal
45	John	cheif	500	600000
93	smith	manager	278	500000
28	david	hr	589	400000
64	natasha	developer	190	300000
79	stark	clerk	732	200000

b. Add primary key constraint and not null constraint to the employee table.

```
create table Employee(
Empno int NOT NULL,
Ename Varchar(20),
Job Varchar(20),
Mgr int,
Sal int,
PRIMARY KEY (`Empno`)
);
```

c. Insert null values to the employee table and verify the result.

```
insert into Employee(Empno,Ename,Job,Mgr,Sal)
VALUES
(NULL,"Meth","accountant","345",278455);
```



d. Add a column commission with domain to the Employee table.

```
ALTER TABLE Employee
ADD Commision int;
```

	Empno	Ename	Job	Mgr	Sal	Commision
▶	45	John	cheif	500	600000	NULL
	93	smith	manager	278	500000	NULL
	28	david	hr	589	400000	NULL
	64	natasha	developer	190	300000	NULL
	79	stark	clerk	732	200000	NULL

e. Insert any five records into the table.

```
insert into Employee(Empno,Ename,Job,Mgr,Sal,commision)
VALUES
("11","Jhoe","accountant","95",68405,8989),
("12","theo","manager","99",51503,8787),
("13","singh","clerk","90",25103,7676),
("14","Jim","manager","83",25503,2323),
("15","ravi","clerk","37",367,56796);
```

11	Jhoe	accountant	95	68405	8989
12	theo	manager	99	51503	8787
13	singh	clerk	90	25103	7676
14	Jim	manager	83	25503	2323
15	ravi	clerk	37	367	56796

f. Update the column details of job

```
UPDATE Employee
SET Job="manager"
WHERE Empno=14;
```

14	Jim	manager	83	25503	2323

g. Rename the column of Employ table using alter command.

```
ALTER TABLE Employee
RENAME COLUMN Sal TO salary;
```

	Empno	Ename	Job	Mgr	salary	Commision
▶	45	John	cheif	500	600000	NULL
	93	smith	manager	278	500000	NULL
	28	david	hr	589	400000	NULL
	64	natasha	developer	190	300000	NULL
	79	stark	clerk	732	200000	NULL

h. Delete the employee whose empno is 1.

DELETE FROM Employee
WHERE Empno=45;

	Empno	Ename	Job	Mgr	salary	Commision
▶	93	smith	manager	278	500000	NULL
	28	david	hr	589	400000	NULL
	64	natasha	developer	190	300000	NULL

2. Create Department table with the following structure.

Name	Type
Deptno	Number
Deptname	Varchar2(20)
Location	Varchar2(20)
Designation	Varchar2(20)

	Deptno	Deptname	Location
▶	1	Finance	Mumbai
	2	Audit	Vizag
	3	tax	delhi
	4	hr	hyderabad

A. Insert values in the department table and use commit.

BEGIN;
insert into Department(Deptno,Deptname,Location)
VALUES
("29","HR","West"),
("28","TAX","South"),
("27","FINANCE","north"),
("25","PRODUCT DEVELOPMENT","east");
COMMIT;

25	PRODUCT DEVELOPMENT	east
27	FINANCE	north
28	TAX	South
29	HR	West

TAX

B. Add constraints like unique and not null to the department table.

```
CREATE TABLE `DEPARTMENT` (
`Deptno` int NOT NULL UNIQUE,
`Deptname` varchar(255) NOT NULL,
`Location` varchar(255) NOT NULL,
PRIMARY KEY (`Deptno`)
) ;
```

C. Insert repeated values and null values into the table.

```
insert into Department(Deptno,Deptname,Location)
VALUES
(NULL,"TAX","south"),
("29","FINANCE","north");
```

36	19:19:08	INSERT INTO `DEPARTMENT`(`Deptno`,`Deptname`,`Location`,`Designation`) VA...	Error Code: 1048. Column 'Deptno' cannot be null	0.000
37	19:20:48	INSERT INTO `DEPARTMENT`(`Deptno`,`Deptname`,`Location`,`Designation`) VA...	Error Code: 1062. Duplicate entry '9' for key 'department.PRIMARY'	

D. Add column designation to the department table.

```
ALTER TABLE Department
ADD Designation varchar(20);
```

Deptno	Deptname	Location	Designation
1	Finance	Mumbai	NULL
2	Audit	Vizag	NULL
3	tax	delhi	NULL
4	hr	hyderabad	NULL

E. Insert values into the table.

```
insert into Department(Deptno,Deptname,Location,Designation)
VALUES
("15","CUSTOMER CARE","guntur","SERVICES");
```

15	CUSTOMER CARE	guntur	SERVICES

F. List the records of emp table grouped by deptno.

```
SELECT * FROM  DEPARTMENT GROUP BY Deptno;
```

Deptno	Deptname	Location	Designation
1	Finance	Mumbai	NULL
2	Audit	Vizag	NULL
3	tax	delhi	NULL
4	hr	hyderabad	NULL
15	CUSTOMER CARE	guntur	SERVICES
25	PRODUCT DEVELOPMENT	east	NULL
27	FINANCE	north	NULL
28	TAX	South	NULL
29	HR	West	NULL

G. Update the record where deptno is 9.

```
UPDATE DEPARTMENT
SET Deptname="Accounts"
WHERE Deptno=4;
```

4	Accounts	hyderabad	NULL

H. Delete any column data from the table

```
ALTER TABLE DEPARTMENT
DROP COLUMN Location;
```

Deptno	Deptname	Designation
1	Finance	NULL
2	Audit	NULL
3	tax	NULL
4	Accounts	NULL
15	CUSTOMER CARE	SERVICES

3. Create a table called Customer table with the following structure.

Name	Type
Cust_name	Number
Cust_street	Varchar2(20)
Cust_city	Varchar2(20)

	Cust_name	Cust_street	Cust_city
▶	ravi	nizampet	Hyderabad
	suresh	vasanth nagar	Bangalore
	ram	imperial	Delhi
	leo	pearl street	Chennei

A. Add constraint primary key and foreign key to the table.

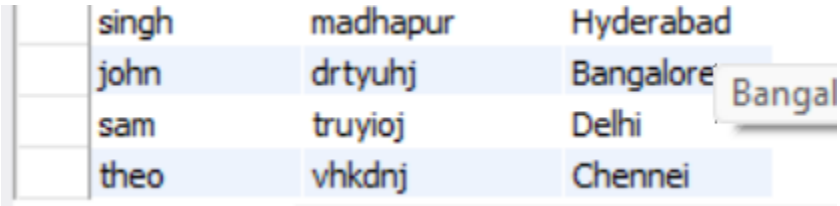
```
CREATE TABLE Customer (
cust_name varchar(255),
Cust_street varchar(255) ,
Cust_city varchar(255),
primary key(Cust_name),
FOREIGN KEY (Cust_name) REFERENCES CONSUMER(Cust_name)
);

/* I created a consumer table for the sake of creating foreign key */

CREATE TABLE CONSUMER (
Cust_name varchar(255),
primary key(Cust_name)
);
```

B. Insert records into the table.

INSERT INTO CUSTOMER(Cust_name,Cust_street,Cust_city)
VALUES
("singh","madhapur","Hyderabad"),
("john","drtyuhj","Bangalore"),
("sam","truyioj","Delhi"),
("theo","vhkdnj","Chennei");

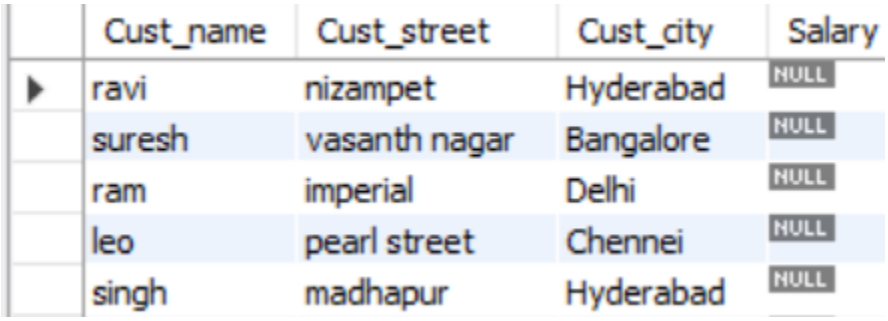


	singh	madhapur	Hyderabad
	john	drtyuhj	Bangalore
	sam	truyioj	Delhi
	theo	vhkdnj	Chennei

Bangal

C. Add salary column to the table.

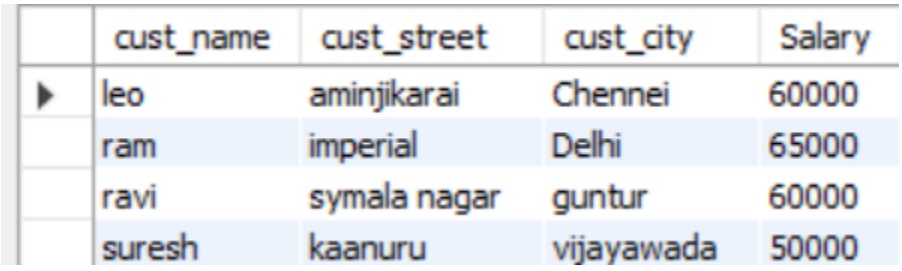
ALTER TABLE CUSTOMER
ADD Salary int;



	Cust_name	Cust_street	Cust_city	Salary
▶	ravi	nizampet	Hyderabad	NULL
	suresh	vasanth nagar	Bangalore	NULL
	ram	imperial	Delhi	NULL
	leo	pearl street	Chennei	NULL
	singh	madhapur	Hyderabad	NULL

D. Alter the table column domain.

alter table Customer modify Salary int



	cust_name	cust_street	cust_city	Salary
▶	leo	aminjikarai	Chennei	60000
	ram	imperial	Delhi	65000
	ravi	symala nagar	guntur	60000
	suresh	kaanuru	vijayawada	50000

E. Drop salary column of the customer table.

ALTER TABLE CUSTOMER
DROP Salary ;

Cust_name	Cust_street	Cust_city
ravi	nizampet	Hyderabad
suresh	vasanth nagar	Bangalore
ram	imperial	Delhi
leo	pearl street	Chennei
singh	madhapur	Hyderabad

F. Delete the rows of customer table whose cust_city is „hyd"

DELETE FROM CUSTOMER WHERE Cust_city="Hyderabad";

Cust_name	Cust_street	Cust_city
suresh	vasanth nagar	Bangalore
ram	imperial	Delhi
leo	pearl street	Chennei
john	drtyuhj	Bangalore
sam	truyioj	Delhi