DBMS PRACTICAL FILE

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Experiment No. 1

Title- Create a table called Employee with the following structure

NAME	TYPE
Empno	Number
Ename	Varchar2(20)
Job	Varchar2(20)
Mgr	Number
Sal	Number

a. Add a column commission with domain to the employee table.
b. Insert any five records into the table.
c. Update the column details of job.
d. Rename the column of Employ table using alter command.
e. Delete the employee whose Empno is 19.

INPUT-

```
CREATE TABLE Employee (Empno NUMBER,Ename VARCHAR2(20),Job VARCHAR2(20),Mgr NUMBER,Sal NUMBER);
ALTER TABLE Employee ADD Commission NUMBER;
INSERT INTO Employee (Empno, Ename, Job, Mgr, Sal, Commission) VALUES (1, 'Alok', 'Manager', 4, 60000, 5000);
INSERT INTO Employee (Empno, Ename, Job, Mgr, Sal, Commission) VALUES (2, 'Bobby', 'Developer', 1, 50000, 3000);
INSERT INTO Employee (Empno, Ename, Job, Mgr, Sal, Commission) VALUES (3, 'Charlie', 'Analyst', 1, 45000, 2500);
INSERT INTO Employee (Empno, Ename, Job, Mgr, Sal, Commission) VALUES (4, 'Jack', 'Designer', 2, 40000, 2000);
INSERT INTO Employee (Empno, Ename, Job, Mgr, Sal, Commission) VALUES (19, 'Moly', 'Tester', 3, 35000, 1500);
UPDATE Employee SET Job = 'Senior Developer' WHERE Empno = 2;
ALTER TABLE Employee RENAME COLUMN Ename To EmployeeName;
DELETE FROM Employee WHERE Empno = 19;
```

FINAL OUTPUT-

EMPNO	EMPLOYEENAME	JOB	MGR	SAL	COMMISSION
1	Alok	Manager	4	60000	5000
2	Bobby	Senior Developer	1	50000	3000
3	Charlie	Analyst	1	45000	2500
4	Jack	Designer	2	40000	2000

Experiment No. 2

Title- Create department table with the following structure.

NAME	TYPE
Deptno	Number
Deptname	Varchar2(20)
Location	Varchar2(20)

a. Add column designation to the department table.
b. Insert values into the table.
c. List the records of emp table grouped by deptno
d. Update the record where deptno is 9
e. Delete any column data from the table

INPUT-

```
CREATE TABLE department (Deptno NUMBER PRIMARY KEY,Deptname VARCHAR2(20),Location VARCHAR2(20));
ALTER TABLE department ADD Designation VARCHAR2(20);
INSERT INTO department (Deptno, Deptname, Location, Designation) VALUES (1, 'HR', 'New Delhi', 'Manager');
INSERT INTO department (Deptno, Deptname, Location, Designation) VALUES (2, 'IT', 'UP', 'Developer');
INSERT INTO department (Deptno, Deptname, Location, Designation) VALUES (4, 'Finance', 'Delhi', 'Analyst');
INSERT INTO department (Deptno, Deptname, Location, Designation) VALUES (9, 'Marketing', 'nepal', 'Executive');
SELECT deptno, COUNT(*) AS employee_count FROM department GROUP BY deptno;
UPDATE department SET Location = 'FBD', Designation = 'Advisor' WHERE Deptno = 9;
UPDATE department SET Designation = NULL;
```

FINAL OUTPUT-

DEPTNO	DEPTNAME	LOCATION	DESIGNATION
1	HR	New Delhi	-
2	IT	UP	-
4	Finance	Delhi	-
9	Marketing	FBD	-

EXPERIMENT NO. 3

Title- Create a table called customer table.

Name	Type
Cust name	Varchar2(20)
Cust street	Varchar2(20)
Cust city	Varchar2(20)

a. Insert records into the table
b. Add salary column to the table.
c. Alter the table column domain.
d. Drop salary column of the customer table.
e. Delete the rows of customer table whose cust city is "hyd'.

INPUT-

```
CREATE TABLE customer (Cust_name VARCHAR2(20),Cust_street VARCHAR2(20),Cust_city VARCHAR2(20));
INSERT INTO customer (Cust_name, Cust_street, Cust_city) VALUES ('John ', '123 chowk', 'Delhi');
INSERT INTO customer (Cust_name, Cust_street, Cust_city) VALUES ('varun', '4 street', 'Pune');
INSERT INTO customer (Cust_name, Cust_street, Cust_city) VALUES ('Alice Johnson', '7 street', 'Hyd');
ALTER TABLE customer ADD salary NUMBER;
ALTER TABLE customer MODIFY Cust_name  VARCHAR2(20);
ALTER TABLE customer DROP COLUMN salary;
DELETE FROM customer WHERE Cust_city = 'Hyd';
```

FINAL OUTPUT-

CUST_NAME	CUST_STREET	CUST_CITY
John	123 chowk	Delhi
varun	4 street	Pune

EXPERIMENT NO. 4

Title- Create a table called branch table.

Name	Type
Branch name	Varchar2(20)
Branch city	Varchar2(20)

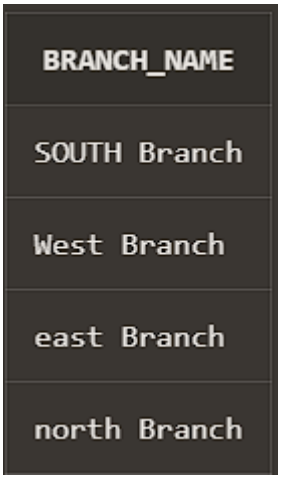
asserts	Number

a. Increase the size of data type for asserts to the branch.
b. Add and drop a column to the branch table
c. Insert values to the table
d. Update the branch name column
e. Delete any two columns from the table

INPUT-

```
CREATE TABLE branch (Branch_name VARCHAR2(20),Branch_city VARCHAR2(20),asserts NUMBER);
ALTER TABLE branch MODIFY asserts NUMBER(10);
 ALTER TABLE branch ADD branch_manager VARCHAR2(20);
ALTER TABLE branch DROP COLUMN branch_manager;
INSERT INTO branch (Branch_name, Branch_city, asserts) VALUES ('Main Branch', 'New Delhi', 1000);
INSERT INTO branch (Branch_name, Branch_city, asserts) VALUES ('West Branch', 'KASHMIR', 2000);
INSERT INTO branch (Branch_name, Branch_city, asserts) VALUES ('east Branch', 'FBD', 3000);
INSERT INTO branch (Branch_name, Branch_city, asserts) VALUES ('north Branch', 'UP', 4000);
UPDATE branch SET Branch_name = 'SOUTH Branch' WHERE Branch_city = 'New Delhi';
ALTER TABLE branch DROP COLUMN Branch_city;
ALTER TABLE branch DROP COLUMN asserts;
```

FINAL OUTPUT-



BRANCH_NAME
SOUTH Branch
West Branch
east Branch
north Branch

EXPERIMENT NO. 5

Title- Create a table called sailor table.

Name	Type
Sid	Number
Sname	Varchar2(20)
rating	Varchar2(20)

a. Add column age to the sailor table.
b. Insert values into the sailor table.
c. Delete the row with rating >8.
d. Update the column details of sailor.
e. Insert null values into the table.

INPUT-

```
1  CREATE TABLE sailor (Sid NUMBER,Sname VARCHAR2(20),rating VARCHAR2(20));
2  ALTER TABLE sailor ADD age NUMBER;
3  INSERT INTO sailor (Sid, Sname, rating, age) VALUES (1, 'oggy', '5', 25);
4  INSERT INTO sailor (Sid, Sname, rating, age) VALUES (2, 'jack', '9', 30);
5  INSERT INTO sailor (Sid, Sname, rating, age) VALUES (3, 'Bob', '7', 22);
6  INSERT INTO sailor (Sid, Sname, rating, age) VALUES (NULL, NULL,'9', NULL);
7  DELETE FROM sailor WHERE rating > '8';
8  UPDATE sailor SET age = 23, rating = '6' WHERE Sname = 'Bob';
9  INSERT INTO sailor (Sid, Sname, rating, age) VALUES (NULL, NULL,NULL, NULL);
10 INSERT INTO sailor (Sid, Sname, rating, age) VALUES (NULL, NULL,NULL, NULL);
```

FINAL OUTPUT-

SID	SNAME	RATING	AGE
1	oggy	5	25
3	Bob	6	23
-	-	-	-
-	-	-	-

EXPERIMENT NO. 6

Title- Create a table called reserves table

Name	Type
Boat id	Integer
sid	Integer
day	Integer

a. Insert values into the reserves table.
b. Add column time to the reserves table.
c. Alter the column day data type to date.
d. Drop the column time in the table.
e. Delete the row of the table with some condition.

INPUT-

```
1  CREATE TABLE reserve (boat_id INTEGER,sid INTEGER,day INTEGER);
2  INSERT INTO reserve (boat_id, sid, day) VALUES (1, 11, 20240403);
3  INSERT INTO reserve (boat_id, sid, day) VALUES (2, 12, 20240404);
4  INSERT INTO reserve (boat_id, sid, day) VALUES (3, 13, 20240405);
5  INSERT INTO reserve (boat_id, sid, day) VALUES (4, 14, 20240406);
6  ALTER TABLE reserve ADD time VARCHAR2(8);
7  ALTER TABLE reserve MODIFY day DATE;
8  ALTER TABLE reserve DROP COLUMN time;
9  DELETE FROM reserve WHERE boat_id = 1;
```

FINAL OUTPUT-

BOAT_ID	SID	DAY
2	12	20240404
3	13	20240405
4	14	20240406