1. 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.

Ans-1)

Live SQL

SQL Worksheet

```
1  --Create table Employee (Empno number, Ename varchar2(20), Job varchar2(20), Mgr number, Sal number);
2
3  --ALTER TABLE Employee
4  --ADD Commission number;
5
6  --INSERT INTO Employee VALUES (1, 'John', 'Manager', 101, 5000, 200);
7  --INSERT INTO Employee VALUES (2, 'Jane', 'Analyst', 102, 4000, 150);
8  --INSERT INTO Employee VALUES (3, 'Mark', 'Clerk', 103, 3000, 100);
9  --INSERT INTO Employee VALUES (4, 'Lucy', 'Salesman', 104, 4500, 250);
10 --INSERT INTO Employee VALUES (5, 'Tom', 'Developer', 105, 5500, 300);
11 --INSERT INTO Employee VALUES (19, 'Laksh', 'Senior Developer', 119, 6500, 600);
12
13 --UPDATE Employee
14 --SET Job = 'Senior Manager'
15 --WHERE Empno = 1;
16
17 --ALTER TABLE Employee
18 --RENAME COLUMN Sal TO Salary;
19
20 --DELETE FROM Employee
21 --WHERE Empno = 19;
22
23 SELECT * FROM Employee
```

0 row(s) deleted.

EMPNO	ENAME	JOB	MGR	SALARY	COMMISSION
1	John	Senior Manager	101	5000	200
2	Jane	Analyst	102	4000	150
3	Mark	Clerk	103	3000	100
4	Lucy	Salesman	104	4500	250
5	Tom	Developer	105	5500	300

Download CSV

5 rows selected.

2. 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.

Ans-2)

Live SQL

SQL Worksheet

```
1  --CREATE table Departments (Deptno number, Deptname varchar2(20), location varchar2(20));
2
3  --ALTER TABLE Departments
4  --ADD designation VARCHAR2(20);
5
6  --INSERT INTO Departments VALUES (1, 'HR', 'New York', 'Manager');
7  --INSERT INTO Departments VALUES (2, 'Finance', 'Los Angeles', 'Analyst');
8  --INSERT INTO Departments VALUES (3, 'IT', 'San Francisco', 'Developer');
9  --INSERT INTO Departments VALUES (4, 'Marketing', 'Chicago', 'Executive');
10 --INSERT INTO Departments VALUES (5, 'Sales', 'Houston', 'Salesman');
11
12 --SELECT deptno, COUNT(*) AS emp_count
13 --FROM Employee
14 --GROUP BY deptno;
15
16 --UPDATE departments
17 --SET Deptno = 'Operations', location = 'Chicago', designation = 'Lead'
18 --WHERE Deptno = 9;
19
20 --UPDATE departments
21 --SET location = NULL;
22
23 SELECT * FROM Departments
```

DEPTNO	DEPTNAME	LOCATION	DESIGNATION
1	HR	-	Manager
2	Finance	-	Analyst
3	IT	-	Developer
4	Marketing	-	Executive
5	Sales	-	Salesman

Download CSV

5 rows selected.

3. 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'.

Ans-3)

Live SQL

SQL Worksheet

```
1  --CREATE table Customer (Cust_name varchar2(20), Cust_street varchar2(20), Cust_city varchar2(20));
2
3  --INSERT INTO Customer VALUES ('John Doe', '123 Elm Street', 'New York');
4  --INSERT INTO Customer VALUES ('Jane Smith', '456 Maple Avenue', 'Los Angeles');
5  --INSERT INTO Customer VALUES ('Alice Brown', '789 Oak Lane', 'Chicago');
6  --INSERT INTO Customer VALUES ('Bob White', '321 Pine Road', 'Houston');
7  --INSERT INTO Customer VALUES ('Charlie Green', '654 Cedar Drive', 'Hyderabad');
8
9  --ALTER TABLE Customer
10 --ADD salary NUMBER;
11
12 --ALTER TABLE Customer
13 --MODIFY Cust_street VARCHAR2(50);
14
15 --ALTER TABLE Customer
16 --DROP COLUMN salary;
17
18 --DELETE FROM Customer
19 --WHERE Cust_city = 'hyd';
20
21 SELECT * FROM Customer
```

CUST_NAME	CUST_STREET	CUST_CITY
John Doe	123 Elm Street	New York
Jane Smith	456 Maple Avenue	Los Angeles
Alice Brown	789 Oak Lane	Chicago
Bob White	321 Pine Road	Houston
Charlie Green	654 Cedar Drive	Hyderabad

Download CSV

5 rows selected.

4. 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

Ans-4)

Live SQL

SQL Worksheet

```
1  --CREATE table Branchs (Branch_name varchar2(20), Branch_city varchar2(20), asserts number);
2
3  --ALTER TABLE Branchs
4  --MODIFY asserts Number(10);
5
6  --ALTER TABLE Branchs
7  --ADD branch_code VARCHAR2(10);
8
9  --ALTER TABLE Branchs
10 --DROP COLUMN branch_code;
11
12 --INSERT INTO Branchs VALUES ('Downtown', 'New York', 50000);
13 --INSERT INTO Branchs VALUES ('Uptown', 'Los Angeles', 40000);
14 --INSERT INTO Branchs VALUES ('Central', 'Chicago', 30000);
15 --INSERT INTO Branchs VALUES ('East Side', 'Houston', 45000);
16 --INSERT INTO Branchs VALUES ('West Side', 'San Francisco', 55000);
17
18 --UPDATE Branchs
19 --SET Branch_name = 'Main Office'
20 --WHERE Branch_city = 'New York';
21
22 --ALTER TABLE Branch
23 --DROP COLUMN Branch_city;
24 --ALTER TABLE Branch
25 --DROP COLUMN asserts;
26
27 SELECT * FROM Branchs
```

BRANCH_NAME	BRANCH_CITY	ASSERTS
Downtown	New York	50000
Uptown	Los Angeles	40000
Central	Chicago	30000
East Side	Houston	45000
West Side	San Francisco	55000

Download CSV

5 rows selected.

5. 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.

Ans-5)

Live SQL

SQL Worksheet

```
1  --CREATE table Sailor (Sid number, Sname varchar2(20), Rating varchar2(20));
2
3  --ALTER TABLE sailor ADD age NUMBER;
4
5  --INSERT INTO Sailor VALUES (1, 'John', 'A', 1);
6  --INSERT INTO Sailor VALUES (2, 'Ellis', 'B', 2);
7  --INSERT INTO Sailor VALUES (3, 'John', 'C', 3);
8  --INSERT INTO Sailor VALUES (4, 'Lucifer', 'D', 4);
9  --INSERT INTO Sailor VALUES (5, 'Bella', 'E', 10);
10
11 --DELETE FROM sailor
12 --WHERE rating > '8';
13
14 --UPDATE sailor
15 --SET Sname = 'John Smith', rating = 'A+'
16 --WHERE Sid = 1;
17
18 --INSERT INTO sailor (Sid, Sname, rating, age)
19 --VALUES (3, NULL, NULL, NULL);
20
21 SELECT * FROM Sailor
```

SID	SNAME	RATING	AGE
3	-	-	-

Download CSV

6. 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.

Ans-6)

Live SQL

SQL Worksheet

```
1  --CREATE table Reserves (Boat_id INTEGER, Sid INTEGER, Day INTEGER);
2
3  --INSERT INTO Reserves VALUES (101, 1, 15);
4  --INSERT INTO Reserves VALUES (102, 2, 20);
5  --INSERT INTO Reserves VALUES (103, 3, 25);
6  --INSERT INTO Reserves VALUES (104, 4, 30);
7  --INSERT INTO Reserves VALUES (105, 5, 35);
8
9  --ALTER TABLE Reserves ADD time TIMESTAMP;
10 --ALTER TABLE Reserves MODIFY day DATE;
11 --ALTER TABLE Reserves DROP COLUMN time;
12
13 --DELETE FROM reserves
14 --WHERE Sid = 1;
15
16 SELECT * FROM Reserves
```

BOAT_ID	SID	DAY
102	2	20
103	3	25
104	4	30
105	5	35

Download CSV

4 rows selected.