CREATE TABLE EMP(EMPNO NUMBER,EMPNAME VARCHAR(20),JOB VARCHAR(20),SAL NUMBER);

Table created.

SQL> DESC EMP;

Name Null? Type

----------------------------------------- -------- ----------------------------

EMPNO NUMBER

EMPNAME VARCHAR2(20)

JOB VARCHAR2(20)

SAL NUMBER

SQL> INSERT INTO EMP VALUES(&EMPNO,'&EMPNAME','&JOB',&SAL);

Enter value for empno: 101

Enter value for empname: SHAIBIN K B

Enter value for job: DEVOLPER

Enter value for sal: 50000

old 1: INSERT INTO EMP VALUES(&EMPNO,'&EMPNAME','&JOB',&SAL)

new 1: INSERT INTO EMP VALUES(101,'SHAIBIN K B','DEVOLPER',50000)

SQL> /

Enter value for empno: 102

Enter value for empname: SHIJO

Enter value for job: TESTER

Enter value for sal: 40000

old 1: INSERT INTO EMP VALUES(&EMPNO,'&EMPNAME','&JOB',&SAL)

new 1: INSERT INTO EMP VALUES(102,'SHIJO','TESTER',40000)

1 row created.

SQL> /

Enter value for empno: 103

Enter value for empname: SREEKANTH

Enter value for job: DEVOPS

Enter value for sal: 50000

old 1: INSERT INTO EMP VALUES(&EMPNO,'&EMPNAME','&JOB',&SAL)

new 1: INSERT INTO EMP VALUES(103,'SREEKANTH','DEVOPS',50000)

1 row created.

SQL> /

Enter value for empno: 104

Enter value for empname: SREYAS

Enter value for job: NETWORK

Enter value for sal: 60000

old 1: INSERT INTO EMP VALUES(&EMPNO,'&EMPNAME','&JOB',&SAL)

new 1: INSERT INTO EMP VALUES(104,'SREYAS','NETWORK',60000)

1 row created.

SQL> ALTER TABLE EMP ADD(COMMISION NUMBER);

Table altered.

SQL> SELECT \* FROM EMP;

EMPNO EMPNAME JOB SAL COMMISION

---------- -------------------- -------------------- ----------- ---------

101 SHAIBIN K B DEVOLPER 50000

102 SHIJO TESTER 40000

103 SREEKANTH DEVOPS 50000

104 SREYAS NETWORK 60000

SQL> UPDATE EMP SET JOB='TRAINEE' WHERE EMPNO=102;

1 row updated.

SQL> SELECT \* FROM EMP;

EMPNO EMPNAME JOB SAL COMMISION

---------- -------------------- -------------------- ---------- ----------

101 SHAIBIN K B DEVOLPER 50000

102 SHIJO TRAINEE 40000

103 SREEKANTH DEVOPS 50000

104 SREYAS NETWORK 60000

SQL> ALTER TABLE EMP RENAME COLUMN SAL TO SALARY;

Table altered.

EMPNO EMPNAME JOB SALARY COMMISION

---------- -------------------- -------------------- ---------- ----------

101 SHAIBIN K B DEVOLPER 50000

102 SHIJO TRAINEE 40000

103 SREEKANTH DEVOPS 50000

104 SREYAS NETWORK 60000

SQL> DELETE FROM EMP WHERE EMPNO=104;

1 row deleted.

SQL> SELECT \* FROM EMP;

EMPNO EMPNAME JOB SALARY COMMISION

---------- -------------------- -------------------- ---------- ----------

101 SHAIBIN K B DEVOLPER 50000

102 SHIJO TRAINEE 40000

103 SREEKANTH DEVOPS 50000

2. CREATE THE DEPARTMENT TABLE WITH THE FOLLOWING STRUCTURE

SQL> CREATE TABLE DEPARTMENT(DEPTNO NUMBER(10),DEPTNAME VARCHAR(20),LOCATION VARCHAR(20),PRIMARY KEY(DEPTNO));

Table created.

SQL> INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION');

Enter value for deptno: 101

Enter value for deptname: COMPUTER

Enter value for location: PALA

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(101,'COMPUTER','PALA')

1 row created.

SQL> INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION');

Enter value for deptno: 102

Enter value for deptname: SCIENCE

Enter value for location: THEEKOY

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(102,'SCIENCE','THEEKOY')

1 row created.

SQL> INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION');

Enter value for deptno: 103

Enter value for deptname: SOCIOLOGY

Enter value for location: KOTTAYAM

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(103,'SOCIOLOGY','KOTTAYAM')

1 row created.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION

---------- -------------------- --------------------

101 COMPUTER             PALA

102 SCIENCE              THEEKOY

103 SOCIOLOGY            KOTTAYAM

SQL> UPDATE EMPLOYEE1 SET COMMISSION=5000 WHERE EMPNO =102;

1 row updated.

SQL> SELECT \* FROM EMPLOYEE1;

EMPNO EMPNAME               JOB                      SALARY COMMISSION

---------- -------------------- -------------------- ---------- ----------

100 SHIJO JOSE           TESTER                    20000

102 SREEKANTH PRADEEP    MANAGER               50000       5000

103 SREYAS SATHESH       TRAINEE                  15000

SQL> UPDATE EMPLOYEE1 SET COMMISSION=5000 WHERE EMPNO =100;

1 row updated.

SQL> UPDATE EMPLOYEE1 SET COMMISSION=6000 WHERE EMPNO =103;

1 row updated.

SQL> SELECT \* FROM EMPLOYEE1;

EMPNO EMPNAME              JOB                      SALARY COMMISSION

---------- -------------------- -------------------- ---------- ----------

100 SHIJO JOSE           TESTER                    20000       5000

102 SREEKANTH PRADEEP    MANAGER                   50000       5000

103 SREYAS SATHESH       TRAINEE                   15000       6000

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION

---------- -------------------- --------------------

101 COMPUTER             PALA

102 SCIENCE              THEEKOY

103 SOCIOLOGY            KOTTAYAM

SQL> ALTER TABLE DEPARTMENT ADD(DESIGNATION VARCHAR(20));

Table altered.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION             DESIGNATION

---------- -------------------- -------------------- --------------------

101 COMPUTER             PALA

102 SCIENCE              THEEKOY

103 SOCIOLOGY            KOTTAYAM

SQL> UPDATE DEPARTMENT SET DESIGNATION=TEACHER WHERE DEPTNO=101;

UPDATE DEPARTMENT SET DESIGNATION=TEACHER WHERE DEPTNO=101

\*

ERROR at line 1:

ORA-00904: "TEACHER": invalid identifier

SQL> UPDATE EMPLOYEE1 SET DESIGNATION=TEACHER WHERE DEPTNO=102;

UPDATE EMPLOYEE1 SET DESIGNATION=TEACHER WHERE DEPTNO=102

\*

ERROR at line 1:

ORA-00904: "DEPTNO": invalid identifier

SQL> UPDATE EMPLOYEE1 SET DESIGNATION='TEACHER' WHERE DEPTNO=102;

UPDATE EMPLOYEE1 SET DESIGNATION='TEACHER' WHERE DEPTNO=102

\*

ERROR at line 1:

ORA-00904: "DEPTNO": invalid identifier

SQL> UPDATE EMPLOYEE1 SET DESIGNATION='TEACHER' WHERE "DEPTNO"=102;

UPDATE EMPLOYEE1 SET DESIGNATION='TEACHER' WHERE "DEPTNO"=102

\*

ERROR at line 1:

ORA-00904: "DEPTNO": invalid identifier

SQL> UPDATE EMPLOYEE1 SET DESIGNATION="TEACHER" WHERE DEPTNO=102;

UPDATE EMPLOYEE1 SET DESIGNATION="TEACHER" WHERE DEPTNO=102

\*

ERROR at line 1:

ORA-00904: "DEPTNO": invalid identifier

SQL> UPDATE DEPARTMENT SET DESIGNATION='ACCOUNTANT' WHERE DEPTNO=102;

1 row updated.

SQL> UPDATE DEPARTMENT SET DESIGNATION='TEACHER' WHERE DEPTNO=101;

1 row updated.

SQL> UPDATE DEPARTMENT SET DESIGNATION='HOD' WHERE DEPTNO=103;

1 row updated.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION             DESIGNATION

---------- -------------------- -------------------- --------------------

101 COMPUTER             PALA                 TEACHER

102 SCIENCE              THEEKOY              ACCOUNTANT

103 SOCIOLOGY            KOTTAYAM             HOD

SQL> UPDATE DEPARTMENT SET DESIGNATION='CLERK' WHERE DEPTNO=103;

1 row updated.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION             DESIGNATION

---------- -------------------- -------------------- --------------------

101 COMPUTER             PALA                 TEACHER

102 SCIENCE              THEEKOY              ACCOUNTANT

103 SOCIOLOGY            KOTTAYAM             CLERK

SQL> DELETE FROM DEPARTMENT WHERE DEPTNO=101;

1 row deleted.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION             DESIGNATION

---------- -------------------- -------------------- --------------------

102 SCIENCE              THEEKOY              ACCOUNTANT

103 SOCIOLOGY            KOTTAYAM             CLERK

SQL>

SQL> CREATE TABLE DEPARTMENT(DEPTNO NUMBER(10),DEPTNAME VARCHAR(20),LOCATION VARCHAR(20));

Table created.

SQL> SELECT \* FROM DEPARTMENT;

no rows selected

SQL> INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION');

Enter value for deptno: 101

Enter value for deptname: MCA

Enter value for location: ST FRANCIS BLOCK

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(101,'MCA','ST FRANCIS BLOCK')

1 row created

SQL> /

Enter value for deptno: 102

Enter value for deptname: BBA

Enter value for location: ST PETERS BLOCK

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(102,'BBA','ST PETERS BLOCK')

1 row created.

SQL> /

Enter value for deptno: 103

Enter value for deptname: MBA

Enter value for location: ST JOSEPH BLOCK

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(103,'MBA','ST JOSEPH BLOCK')

1 row created.

SQL> /

Enter value for deptno: 104

Enter value for deptname: BTECH

Enter value for location: ST MARIYS BLOCK

old   1: INSERT INTO DEPARTMENT VALUES(&DEPTNO,'&DEPTNAME','&LOCATION')

new   1: INSERT INTO DEPARTMENT VALUES(104,'BTECH','ST MARIYS BLOCK')

1 row created.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION

---------- -------------------- --------------------

101 MCA                  ST FRANCIS BLOCK

102 BBA                  ST PETERS BLOCK

103 MBA                  ST JOSEPH BLOCK

104 BTECH                ST MARIYS BLOCK

SQL> ALTER TABLE DEPARTMENT ADD(DESIGNATION VARCHAR(20));

Table altered.

SQL> SELECT \* FROM DEPARTMENT;

DEPTNO DEPTNAME             LOCATION             DESIGNATION

---------- -------------------- -------------------- --------------------

101 MCA                  ST FRANCIS BLOCK

102 BBA                  ST PETERS BLOCK

103 MBA                  ST JOSEPH BLOCK

104 BTECH                ST MARIYS BLOCK

3. TABLE Customer

SQL> CREATE TABLE Customer(Cust\_name VARCHAR(20),Cust\_street VARCHAR(20),Cust\_city VARCHAR(20));

Table created.

SQL> DESC Customer;

Name Null? Type

----------------------------------------- -------- ----------------------------

CUST\_NAME VARCHAR2(20)

CUST\_STREET VARCHAR2(20)

CUST\_CITY VARCHAR2(20)

1. Insert records into a table.

SQL> INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city');

Enter value for cust\_name: Sj

Enter value for cust\_street: payappar

Enter value for cust\_city: pala

old 1: INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city')

new 1: INSERT INTO Customer VALUES('Shaibin','payappar','pala')

1 row created.

SQL> INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city');

Enter value for cust\_name: sreyas

Enter value for cust\_street: kattappana

Enter value for cust\_city: idukki

old 1: INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city')

new 1: INSERT INTO Customer VALUES('sreyas','kattappana','idukki')

1 row created.

SQL> INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city');

Enter value for cust\_name: Shijo

Enter value for cust\_street: mundankal

Enter value for cust\_city: thodupuzha

old 1: INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city')

new 1: INSERT INTO Customer VALUES('Shijo','mundankal','thodupuzha')

1 row created.

SQL> INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city');

Enter value for cust\_name: aaron

Enter value for cust\_street: thidanad

Enter value for cust\_city: kaanjar

old 1: INSERT INTO Customer VALUES('&Cust\_name','&cust\_street','&cust\_city')

new 1: INSERT INTO Customer VALUES('aaron','thidanad','kaanjar')

1 row created.

SQL> SELECT \* FROM Customer;

CUST\_NAME CUST\_STREET CUST\_CITY

-------------------- -------------------- --------------------

Shaibin payappar pala

sreyas kattappana idukki

Shijo mundankal thodupuzha

aaron thidanad kaanjar

1. Add a salary column to the table.

SQL> ALTER TABLE Customer ADD(Salary NUMBER(20));

Table altered.

SQL> DESC Customer;

Name Null? Type

----------------------------------------- -------- ----------------------------

CUST\_NAME VARCHAR2(20)

CUST\_STREET VARCHAR2(20)

CUST\_CITY VARCHAR2(20)

SALARY NUMBER(20)

1. Alter the table column domain.
2. Drop salary column of Customer table.

SQL> ALTER TABLE Customer DROP COLUMN Salary;

Table altered.

SQL> DESC Customer;

Name Null? Type

----------------------------------------- -------- ----------------------------

CUST\_NAME VARCHAR2(20)

CUST\_STREET VARCHAR2(20)

CUST\_CITY VARCHAR2(20)

1. Delete the rows of Customer table whose cust\_city is ‘kaanjar ’.

SQL> DELETE FROM Customer WHERE Cust\_city='kaanjar';

1 row deleted.

SQL> SELECT \* FROM Customer;

CUST\_NAME CUST\_STREET CUST\_CITY

-------------------- -------------------- --------------------

Shaibin payappar pala

sreyas kattappana idukki

Shijo mundankal thodupuzha

4. TABLE Branch

SQL> CREATE TABLE Branch(Branch\_name VARCHAR(20),Branch\_city VARCHAR(20),Asserts NUMBER(20));

Table created.

SQL> DESC Branch;

Name Null? Type

----------------------------------------- -------- ----------------------------

BRANCH\_NAME VARCHAR2(20)

BRANCH\_CITY VARCHAR2(20)

ASSERTS NUMBER(20)

1. Increase the size of data type for Asserts to the Branch.

SQL> ALTER TABLE Branch MODIFY Asserts NUMBER(25);

Table altered.

SQL> DESC Branch;

Name Null? Type

----------------------------------------- ------- ----------------------------

BRANCH\_NAME VARCHAR2(20)

BRANCH\_CITY VARCHAR2(20)

ASSERTS NUMBER(25)

1. Add and drop a column to the Branch table.

SQL> ALTER TABLE Branch ADD(Salary NUMBER(20));

Table altered.

SQL> DESC Branch;

Name Null? Type

----------------------------------------- -------- ----------------------------

BRANCH\_NAME VARCHAR2(20)

BRANCH\_CITY VARCHAR2(20)

ASSERTS NUMBER(25)

SALARY NUMBER(20)

SQL> ALTER TABLE Branch DROP(Asserts);

Table altered.

SQL> DESC Branch;

Name Null? Type

----------------------------------------- -------- ----------------------------

BRANCH\_NAME VARCHAR2(20)

BRANCH\_CITY VARCHAR2(20)

SALARY NUMBER(20)

1. Insert values to the table.

SQL> INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary);

Enter value for branch\_name: Pravithanm

Enter value for branch\_city: pala

Enter value for salary: 30000

old 1: INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary)

new 1: INSERT INTO Branch VALUES ('Pravithanm','pala',30000)

1 row created.

SQL> INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary);

Enter value for branch\_name: valavoor

Enter value for branch\_city: payappar

Enter value for salary: 20000

old 1: INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary)

new 1: INSERT INTO Branch VALUES ('valavoor','payappar',20000)

1 row created.

SQL> INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary);

Enter value for branch\_name: elappara

Enter value for branch\_city: kattappana

Enter value for salary: 10000

old 1: INSERT INTO Branch VALUES ('&Branch\_name','&Branch\_city',&Salary)

new 1: INSERT INTO Branch VALUES ('elappara','kattappana',10000)

1 row created.

SQL> SELECT \* FROM Branch;

BRANCH\_NAME BRANCH\_CITY SALARY

-------------------- -------------------- ----------

Pravithanm pala 30000

valavoor payappar 20000

elappara kattappana 10000

**AGGREGATE FUNCTIONS**

**3.Create table emp with attributes sid,ename,age,salary**

SQL> CREATE TABLE EMP1(EID NUMBER PRIMARY KEY,ENAME VARCHAR(20),AGE NUMBER,SALARY NUMBER);

Table created.

SQL> INSERT INTO EMP1 VALUES(&EID,'&ENAME',&AGE,&SALARY);

Enter value for eid: 1

Enter value for ename: SHAIBIN

Enter value for age: 21

Enter value for salary: 20000

old 1: INSERT INTO EMP1 VALUES(&EID,'&ENAME',&AGE,&SALARY)

new 1: INSERT INTO EMP1 VALUES(1,'SHAIBIN',21,20000)

1 row created.

SQL> /

Enter value for eid: 2

Enter value for ename: SHIJO

Enter value for age: 21

Enter value for salary: 30000

old 1: INSERT INTO EMP1 VALUES(&EID,'&ENAME',&AGE,&SALARY)

new 1: INSERT INTO EMP1 VALUES(2,'SHIJO',21,30000)

1 row created.

SQL> /

Enter value for eid: 3

Enter value for ename: SREEKANTH

Enter value for age: 23

Enter value for salary: 35000

old 1: INSERT INTO EMP1 VALUES(&EID,'&ENAME',&AGE,&SALARY)

new 1: INSERT INTO EMP1 VALUES(3,'SREEKANTH',23,35000)

1 row created.

SQL> /

Enter value for eid: 4

Enter value for ename: SREYAS

Enter value for age: 24

Enter value for salary: 40000

old 1: INSERT INTO EMP1 VALUES(&EID,'&ENAME',&AGE,&SALARY)

new 1: INSERT INTO EMP1 VALUES(4,'SREYAS',24,40000)

1 row created.

**2.Find count of employee**

SQL> SELECT COUNT(EID) FROM EMP1;

COUNT(EID)

----------

4

**3.Find the maximum age from the employee table.**

SQL> SELECT MAX(AGE) FROM EMP1;

MAX(AGE)

----------

24

**4.Find the minimum age.**

SQL> SELECT MIN(AGE) FROM EMP1;

MIN(AGE)

----------

21

**5.Find the sum of salary and age.**

SQL> SELECT SUM(SALARY) FROM EMP1;

SUM(SALARY)

-----------

125000

SQL> SELECT SUM(AGE) FROM EMP1;

SUM(AGE)

----------

89

**6.Find Average.**

SQL> SELECT AVG(SALARY) FROM EMP;

AVG(SALARY)

-----------

46666.6667