```
SQL> create table Instructor(Instructor_id varchar(20) primary key, Department_Id varchar(20) reference
s Department(Department_Id),Last_name varchar(20),First_name varchar(200) not null,Telephone varchar(20
) unique,gender char(1) check(gender='F' or gender='M'),city varchar(10) default 'MUMBAI');

Table created.

SQL> desc Instructor
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 INSTRUCTOR_ID                             NOT NULL VARCHAR2(20)
 DEPARTMENT_ID                                      VARCHAR2(20)
 LAST_NAME                                          VARCHAR2(20)
 FIRST_NAME                                NOT NULL VARCHAR2(200)
 TELEPHONE                                          VARCHAR2(20)
 GENDER                                             CHAR(1)
 CITY                                               VARCHAR2(10)
```

D) Create the following described below:

Table Name: EMP

Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
EMPNO	Int	-	-	-	Yes	-
ENAME	Varchar2	10	-	-	-	No
JOB	Varchar2	9	-	-	-	✓
MGR	Int	-	-	-	-	✓
HIREDATE	Date	-	-	-	-	✓
SAL	Number	-	7	2	-	✓
COMM	Int	-	-	-	-	✓
DEPTNO	Int	-	-	-	-	✓

Table Name: DEPT

Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
DEPTNO	Int	-	-	-	Yes	-
DNAME	Varchar2	14	-	-	-	No
LOC	Varchar2	13	-	-	-	✓

```
SQL> create table aangi_DEPT(Dept_no int primary key,Dname varchar(14) not null,Loc varchar(13));

Table created.

SQL> desc aangi_DEPT
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DEPT_NO                                   NOT NULL NUMBER(38)
 DNAME                                     NOT NULL VARCHAR2(14)
 LOC                                                VARCHAR2(13)
```

```
SQL> create table aangi_EMP(EMP_no int primary key,Ename varchar(10) not null,Job varchar(9),MGR int,Hi
redate date,SAL decimal (7,2),Comm int,Dept_no int references aangi_DEPT(Dept_no));

Table created.

SQL> desc aangi_EMP
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMP_NO                                    NOT NULL NUMBER(38)
 ENAME                                     NOT NULL VARCHAR2(10)
 JOB                                                VARCHAR2(9)
 MGR                                                NUMBER(38)
 HIREDATE                                           DATE
 SAL                                                NUMBER(7,2)
 COMM                                               NUMBER(38)
 DEPT_NO                                            NUMBER(38)
```

Practical 2: Study of Data Manipulation Language Statement

A) Insert the following records in above created table

EMP TABLE

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-Nov-81	5000		10
7698	BLAKE	MANAGER	7839	01-May-81	2850		30
7782	CLARK	MANAGER	7839	09-Jun-81	2450		10
7566	JONES	MANAGER	7839	02-Apr-81	2975		20
7788	SCOTT	ANALYST	7566	19-Apr-87	3000		20
7902	FORD	ANALYST	7566	03-Dec-81	3000		20
7369	SMITH	CLERK	7902	17-Dec-80	800		20
7499	ALLEN	SALESMAN	7698	20-Feb-81	1600	300	30
7521	WARD	SALESMAN	7698	22-Feb-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-Sep-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-Sep-81	1500	0	30
7876	ADAMS	CLERK	7788	23-May-87	1100		20
7900	JAMES	CLERK	7698	03-Dec-81	950		30
7934	MILLER	CLERK	7782	23-Jan-82	1300		10

DEPT TABLE

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

```
SQL> insert into aangi_DEPT values(10,'ACCOUNTING','NEW YORK');

1 row created.

SQL> insert into aangi_DEPT values(20,'RESEARCH','DALLAS');

1 row created.

SQL> insert into aangi_DEPT values(30,'SALES','CHICAGO');

1 row created.

SQL> insert into aangi_DEPT values(40,'OPERATIONS','BOSTON');

1 row created.

SQL> SELECT * FROM TABLE aangi_DEPT;
SELECT * FROM TABLE aangi_DEPT
                   *
ERROR at line 1:
ORA-00906: missing left parenthesis


SQL> select * from aangi_DEPT;

   DEPT_NO DNAME          LOC
---------- -------------- -------------
        10 ACCOUNTING     NEW YORK
        20 RESEARCH       DALLAS
        30 SALES          CHICAGO
        40 OPERATIONS     BOSTON
```

```
SQL> select * FROM aangi_EMP
  2  ;

    EMP_NO ENAME      JOB              MGR HIREDATE        SAL       COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7839 KING       PRESIDENT            17-NOV-81       5000
        10

      7698 BLAKE      MANAGER         7839 01-MAY-81       2850
        30

      7782 CLARK      MANAGER         7839 09-JUN-81       2450
        10


    EMP_NO ENAME      JOB              MGR HIREDATE        SAL       COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7566 JONES      MANAGER         7839 02-APR-81       2975
        20

      7788 SCOTT      ANALYST         7566 19-APR-87       3000
        20

      7902 FORD       ANALYST         7566 03-DEC-81       3000
        20


    EMP_NO ENAME      JOB              MGR HIREDATE        SAL       COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7369 SMITH      CLERK           7902 17-DEC-80        800
        20

      7499 ALLEN      SALESMAN        7698 20-FEB-81       1600        300
        30

      7521 WARD       SALESMAN        7698 22-FEB-81       1250        500
        30


    EMP_NO ENAME      JOB              MGR HIREDATE        SAL       COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
```

```
    EMP_NO ENAME       JOB            MGR HIREDATE        SAL        COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
    DEPT_NO
----------
      7654 MARTIN     SALESMAN        7698 28-SEP-81     1250       1400
        30

      7844 TURNER     SALESMAN        7698 08-SEP-81     1500          0
        30

      7876 ADAMS      CLERK           7788 23-MAY-87     1100
        20


    EMP_NO ENAME       JOB            MGR HIREDATE        SAL        COMM
---------- ---------- ---------- ---------- --------- ---------- ----------
    DEPT_NO
----------
      7900 JAMES      CLERK           7698 03-DEC-81      950
        30

      7934 MILLER     CLERK           7782 23-JAN-82     1300
        10
```

B) Underline Update and Delete Queries

1) Update the salary of employees working as CLERK by 500.
2) Update the manager of James as CLARK.
3) Change the role of Miller as MANAGER.
4) Delete the records of Manager
5) Delete the records when salary is greater than 1000.

```
SQL> update aangi_EMP
  2  set SAL=SAL+500
  3  where JOB='CLERK';

4 rows updated.
```

```
    EMP_NO ENAME      JOB          MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7369 SMITH      CLERK         7902 17-DEC-80       1300
        20

      7499 ALLEN      SALESMAN      7698 20-FEB-81       1600        300
        30

      7521 WARD       SALESMAN      7698 22-FEB-81       1250        500
        30


    EMP_NO ENAME      JOB          MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7654 MARTIN     SALESMAN      7698 28-SEP-81       1250       1400
        30

      7844 TURNER     SALESMAN      7698 08-SEP-81       1500          0
        30

      7876 ADAMS      CLERK         7788 23-MAY-87       1600
        20


    EMP_NO ENAME      JOB          MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7900 JAMES      CLERK         7698 03-DEC-81       1450
        30

      7934 MILLER     CLERK         7782 23-JAN-82       1800
        10
```

2) update the manager of james as clark

```
SQL> update aangi_EMP
  2  set JOB='CLARK'
  3  where Ename='JAMES';

1 row updated.
```

```
    EMP_NO ENAME        JOB               MGR HIREDATE         SAL         COMM
--------- ----------  ---------  ----------  ---------  ----------  ----------
  DEPT_NO
---------
     7900 JAMES        CLARK          7698 03-DEC-81         1450
       30
```

3) Change the role of Miller as MANAGER.

```
SQL> update aangi_EMP
  2  set JOB='MANAGER'
  3  where Ename='MILLER';

1 row updated.
```

```
       30

     7934 MILLER      MANAGER        7782 23-JAN-82         1800
       10
```

4) Delete the records of Manager

```
SQL> delete FROM aangi_EMP
  2  where JOB='MANAGER';

4 rows deleted.

SQL> select * FROM aangi_EMP;

    EMP_NO ENAME      JOB              MGR HIREDATE         SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7839 KING       PRESIDENT            17-NOV-81        5000
        10

      7788 SCOTT      ANALYST         7566 19-APR-87        3000
        20

      7902 FORD       ANALYST         7566 03-DEC-81        3000
        20


    EMP_NO ENAME      JOB              MGR HIREDATE         SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7369 SMITH      CLERK           7902 17-DEC-80        1300
        20

      7499 ALLEN      SALESMAN        7698 20-FEB-81        1600        300
        30

      7521 WARD       SALESMAN        7698 22-FEB-81        1250        500
        30


    EMP_NO ENAME      JOB              MGR HIREDATE         SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
   DEPT_NO
----------
      7654 MARTIN     SALESMAN        7698 28-SEP-81        1250       1400
        30

      7844 TURNER     SALESMAN        7698 08-SEP-81        1500          0
        30

      7876 ADAMS      CLERK           7788 23-MAY-87        1600
        20
```

5) Delete the records when salary is greater than 1000.

```
SQL> delete from aangi_EMP
  2  where SAL>1000;

10 rows deleted.

SQL> select * FROM aangi_EMP;

no rows selected
```