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

```
SQL> select * from EMP_Bechu;

    EMPNO ENAME      JOB            MGR HIREDATE       SAL      COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
     7839 KING       PRESIDENT          17-NOV-81      5000
       10


SQL> _
```

```
    2
SQL> insert into EMP_Bechu values(7698,'BLAKE','MANAGER',7839,'09-May-81',2850,'',30);

1 row created.

SQL> insert into EMP_Bechu values(7782,'CLARK','MANAGER',7839,'09-Jun-81',2450,'',10);

1 row created.

SQL> insert into EMP_Bechu values(7566,'JONES','MANAGER',7839,'02-Apr-81',2975,'',20);

1 row created.

SQL> insert into EMP_Bechu values(7788,'SCOTT','ANALYST',7566,'19-Apr-87',3000,'',20);

1 row created.

SQL> insert into EMP_Bechu values(7902,'FORD','ANALYST',7566,'03-Dec-81',3000,'',20);

1 row created.

SQL> insert into EMP_Bechu values(7369,'SMITH','CLERK',7902,'17-Dec-80',800,'',20);

1 row created.

SQL> insert into EMP_Bechu values(7499,'ALLEN','SALESMAN',7698,'20-Feb-81',1600,300,30);

1 row created.

SQL> insert into EMP_Bechu values(7521,'WARD',SALESMAN',7698,'22-Feb-81',1250,500,30);
ERROR:
ORA-01756: quoted string not properly terminated


SQL> insert into EMP_Bechu values(7521,'WARD','SALESMAN',7698,'22-Feb-81',1250,500,30);

1 row created.

SQL> insert into EMP_Bechu values(7654,'MARTIN','SALESMAN',7698,'28-Sep-81',1250'1400,30);
ERROR:
ORA-01756: quoted string not properly terminated


SQL> insert into EMP_Bechu values(7654,'MARTIN','SALESMAN',7698,'28-Sep-81',1250,1400,30);

1 row created.

SQL> insert into EMP_Bechu values(7844,'TURNER','SALESMAN',7698,'08-Sep-81',1500,0,30);

1 row created.

SQL> insert into EMP_Bechu values(7876,'ADAMS','CLERK',7788,'23-May-87',1100,20);
insert into EMP_Bechu values(7876,'ADAMS','CLERK',7788,'23-May-87',1100,20)
            *
ERROR at line 1:
ORA-00947: not enough values


SQL> insert into EMP_Bechu values(7876,'ADAMS','CLERK',7788,'23-May-87',1100,'',20);

1 row created.

SQL> insert into EMP_Bechu values(7900,'JAMES','CLERK',7698,'03-Dec-81',950,'',30);
```

```
SQL> insert into EMP_Bechu values(7934,'MILLER','CLERK',7782,'23-Jan-82',1300,'',10);

1 row created.
```

Run SQL Command Line

```
SQL> select * from EMP_Bechu;

     EMPNO ENAME      JOB            MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
      7839 KING       PRESIDENT            17-NOV-81      5000
        10

      7698 BLAKE      MANAGER         7839 09-MAY-81      2850
        30

      7782 CLARK      MANAGER         7839 09-JUN-81      2450
        10


     EMPNO ENAME      JOB            MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
      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


     EMPNO ENAME      JOB            MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
      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


     EMPNO ENAME      JOB            MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
      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


     EMPNO ENAME      JOB            MGR HIREDATE       SAL       COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
      7900 JAMES      CLERK           7698 03-DEC-81       950
```

```
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> desc DEPT_Bechu
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 DEPTNO                                    NOT NULL NUMBER(38)
 DNAME                                     NOT NULL VARCHAR2(14)
 LOC                                                VARCHAR2(13)
SQL> insert into DEPT_Bechu values(10,'ACCOUNTING','NEW YORK');

1 row created.

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

1 row created.

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

1 row created.

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

1 row created.

SQL> select * from DEPT_Bechu;

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

SQL> _
```

B) Update and Delete Queries

1) Update the salary of employees working as CLERK by 500

```
SQL> update EMP_Bechu
  2  SET SAL=SAL+500
  3  WHERE JOB='CLERK';

4 rows updated.
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
DEPTNO						
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						

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
DEPTNO						
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						

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
DEPTNO						
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						

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
DEPTNO						
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 EMP_Bechu
  2  SET JOB='MANAGER'
  3  WHERE ENAME='JAMES';

1 row updated.
```

```
    EMPNO ENAME       JOB              MGR HIREDATE       SAL        COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
     7900 JAMES       MANAGER         7698 03-DEC-81      1450
       30

     7934 MILLER      CLERK           7782 23-JAN-82      1800
       10

14 rows selected.
SQL>
```

3) Change the role of Miller as MANAGER.

```
SQL> UPDATE EMP_Bechu
  2  SET JOB='MANAGER'
  3  WHERE ENAME='MILLER';

1 row updated.
```

4) Delete the records of Manager

```
14 rows selected.

SQL> delete from EMP_Bechu
  2  WHERE JOB='MANAGER';

5 rows deleted.

SQL> select *  from EMP_Bechu;

    EMPNO ENAME      JOB              MGR HIREDATE      SAL        COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
     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


    EMPNO ENAME      JOB              MGR HIREDATE      SAL        COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
     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


    EMPNO ENAME      JOB              MGR HIREDATE      SAL        COMM
---------- ---------- --------- ---------- --------- ---------- ----------
    DEPTNO
----------
     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

9 rows selected.

SQL>
```

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

```
SQL> delete from EMP_Bechu
  2   WHERE SAL>1000;

9 rows deleted.

SQL> select * from EMP_Bechu;

no rows selected

SQL>
```