1&2)

```
SQL> DESCRIBE EMP_TB;
 Name                                     Null?    Type
 ---------------------------------------- -------- ----------------------------
 EMPNO                                              NUMBER(4)
 ENAME                                              VARCHAR2(25)
 JOB                                                VARCHAR2(12)
 SALARY                                             NUMBER(10,2)
 COMMISSION                                         NUMBER(7,2)
 DEPTNO                                             NUMBER(2)

SQL> SELECT * FROM EMP_TB;

no rows selected

SQL> INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(7369,'SMITH','CLERK',2000,800,20);

1 row created.

SQL> SELECT * FROM EMP_TB;

     EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
      7369 SMITH                    CLERK              2000        800
        20


SQL> INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F);
Enter value for a: 7499
Enter value for b: ALLEN
Enter value for c: SALESMAN
Enter value for d: 1600
Enter value for e: 300
Enter value for f: 30
old   1: INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F)
new   1: INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(7499,'ALLEN','SALESMAN',1600,300,30)

1 row created.
```

3&4)

```
1 row created.

SQL>  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F);
Enter value for a: 7654
Enter value for b: MARTIN
Enter value for c: SALESMAN
Enter value for d: 1250
Enter value for e: 1400
Enter value for f: 30
old   1:  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F)
new   1:  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(7654,'MARTIN','SALESMAN',1250,1400,30)

1 row created.

SQL>  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F);
Enter value for a: 7698
Enter value for b: BLAKE
Enter value for c: MANAGER
Enter value for d: 2850
Enter value for e: NULL
Enter value for f: 30
old   1:  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(&A,'&B','&C',&D,&E,&F)
new   1:  INSERT INTO EMP_TB(EMPNO,ENAME,JOB,SALARY,COMMISSION,DEPTNO)VALUES(7698,'BLAKE','MANAGER',2850,NULL,30)

1 row created.
```

```
SQL> SELECT * FROM EMP_TB;

    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7369 SMITH                    CLERK              2000        800
       20

     7499 ALLEN                    SALESMAN           1600        300
       30

     7521 WARD                     SALESMAN           1250        500


    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7566 JONES                    MANAGER            2975
       20

     7654 MARTIN                   SALESMAN           1250       1400
       30

     7698 BLAKE                    MANAGER            2850
       30


    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7782 CLARK                    MANAGER            2450
       10

     7788 SCOTT                    ANALYST            3000
       20

     7839 KING                     PRESIDENT          5000
       10
```

```
    EMPNO ENAME                    JOB             SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7844 TURNER                    SALESMAN         1500
       30

     7876 ADAMS                     CLERK            1100
       20

     7900 JAMES                     NULL              950
       30


    EMPNO ENAME                    JOB             SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7902 FORD                      ANALYST          3000
       20

     7934 MILLER                    CLERK            1300
       10


14 rows selected.

SQL> UPDATE EMP_TB SET COMMISSION=30 WHERE EMPNO=7521;

1 row updated.

SQL> SELECT * FROM EMP_TB;

    EMPNO ENAME                    JOB             SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7369 SMITH                     CLERK            2000        800
       20

     7499 ALLEN                     SALESMAN         1600        300
       30

     7521 WARD                      SALESMAN         1250         30
```

```
14 rows selected.

SQL> UPDATE EMP_TB SET COMMISSION=30 WHERE EMPNO=7521;

1 row updated.

SQL> SELECT * FROM EMP_TB;

    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7369 SMITH                    CLERK              2000        800
       20

     7499 ALLEN                    SALESMAN           1600        300
       30

     7521 WARD                     SALESMAN           1250         30


    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
----------
     7566 JONES                    MANAGER            2975
       20

     7654 MARTIN                   SALESMAN           1250       1400
       30

     7698 BLAKE                    MANAGER            2850
       30


    EMPNO ENAME                    JOB              SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO
```

5)

```
SQL> UPDATE EMP_TB SET JOB='CLERK' WHERE JOB='NULL';

1 row updated.

SQL> SELECT * FROM EMP_TB;

     EMPNO ENAME                   JOB               SALARY COMMISSION
---------- ----------------------- ------------- ---------- ----------
    DEPTNO
----------
      7369 SMITH                   CLERK               2000        800
        20

      7499 ALLEN                   SALESMAN            1600        300
        30

      7521 WARD                    SALESMAN            1250         30


     EMPNO ENAME                   JOB               SALARY COMMISSION
---------- ----------------------- ------------- ---------- ----------
    DEPTNO
----------
      7566 JONES                   MANAGER             2975
        20

      7654 MARTIN                  SALESMAN            1250       1400
        30

      7698 BLAKE                   MANAGER             2850
        30


     EMPNO ENAME                   JOB               SALARY COMMISSION
---------- ----------------------- ------------- ---------- ----------
    DEPTNO
----------
      7782 CLARK                   MANAGER             2450
        10

      7788 SCOTT                   ANALYST             3000
        20

      7839 KING                    PRESIDENT           5000
        10
```

6)

```
SQL> ALTER TABLE EMP_TB ADD DATE_JOIN date;

Table altered.

SQL> describe emp_tb;
 Name                                      Null?     Type
 ----------------------------------------- --------  ----------------------------
 EMPNO                                                NUMBER(4)
 ENAME                                                VARCHAR2(25)
 JOB                                                  VARCHAR2(12)
 SALARY                                               NUMBER(10,2)
 COMMISSION                                           NUMBER(7,2)
 DEPTNO                                               NUMBER(2)
 DATE_JOIN                                            DATE

SQL> INSERT INTO EMP_TB(DATE_JOIN)VALUES('&A');
Enter value for a: 17-dEC-80
old   1: INSERT INTO EMP_TB(DATE_JOIN)VALUES('&A')
new   1: INSERT INTO EMP_TB(DATE_JOIN)VALUES('17-dEC-80')

1 row created.
```

```
SQL> UPDATE EMP_TB SET DATE_JOIN='20-FEB-81' WHERE EMPNO=7499;

1 row updated.

SQL> UPDATE EMP_TB SET DATE_JOIN='22-FEB-81' WHERE EMPNO=7521;

1 row updated.

SQL> UPDATE EMP_TB SET DATE_JOIN='02-APR-81' WHERE EMPNO=7566;

1 row updated.

SQL> UPDATE EMP_TB SET DATE_JOIN='28-SEP-81' WHERE EMPNO=7654;

1 row updated.
```

```
SQL> SELECT * FROM EMP_TB;

    EMPNO ENAME                        JOB            SALARY COMMISSION
---------- ------------------------- ------------ ---------- ----------
    DEPTNO DATE_JOIN
---------- ---------
      7369 SMITH                      CLERK            2000        800
        20 17-DEC-88

      7499 ALLEN                      SALESMAN         1600        300
        30 20-FEB-81

      7521 WARD                       SALESMAN         1250         30
           22-FEB-81


    EMPNO ENAME                        JOB            SALARY COMMISSION
```

8 & 9)

```
SQL> SELECT DISTINCT JOB FROM EMP_TB;

JOB
------------

CLERK
SALESMAN
PRESIDENT
MANAGER
ANALYST

6 rows selected.

SQL> SELECT ENAME FROM EMP_TB WHERE DEPTNO IN(20,30);

ENAME
-------------------------
SMITH
ALLEN
JONES
MARTIN
BLAKE
SCOTT
TURNER
ADAMS
JAMES
FORD

10 rows selected.

SQL> SELECT ENAME,SALARY+COMMISSION AS 'TOTAL SALARY' FROM EMP_TB;
SELECT ENAME,SALARY+COMMISSION AS 'TOTAL SALARY' FROM EMP_TB
                                      *
ERROR at line 1:
ORA-00923: FROM keyword not found where expected


SQL> SELECT ENAME (SALARY+COMMISSION) AS "TOTAL SALARY" FROM EMP_TB;
SELECT ENAME (SALARY+COMMISSION) AS "TOTAL SALARY" FROM EMP_TB
       *
ERROR at line 1:
ORA-00904: "ENAME": invalid identifier
```

10)

```
SQL> SELECT ENAME,(SALARY+COMMISSION) AS "TOTAL SALARY" FROM EMP_TB;

ENAME                      TOTAL SALARY
------------------------ ------------
SMITH                            2800
ALLEN                            1900
WARD                             1280
JONES
MARTIN                           2650
BLAKE
CLARK
SCOTT
KING
TURNER
ADAMS

ENAME                      TOTAL SALARY
------------------------ ------------
JAMES
FORD
MILLER


15 rows selected.
```

11)

```
SQL> SELECT ENAME,(SALARY*12) AS "ANNUAL SALARY" FROM EMP_TB;

ENAME                      ANNUAL SALARY
------------------------ -------------
SMITH                            24000
ALLEN                            19200
WARD                             15000
JONES                            35700
MARTIN                           15000
BLAKE                            34200
CLARK                            29400
SCOTT                            36000
KING                             60000
TURNER                           18000
ADAMS                            13200

ENAME                      ANNUAL SALARY
------------------------ -------------
JAMES                            11400
FORD                             36000
MILLER                           15600
```

12)

```
SQL> SELECT *FROM EMP_TB WHERE DATE_JOIN='03-DEC-81';

     EMPNO ENAME                    JOB             SALARY COMMISSION
---------- ------------------------ ------------ ---------- ----------
    DEPTNO DATE_JOIN
---------- ---------
      7900 JAMES                    CLERK               950
        30 03-DEC-81

      7902 FORD                     ANALYST            3000
        20 03-DEC-81
```

13)

```
SQL> SELECT ENAME,SALARY AS "TOTAL SALARY" FROM EMP_TB WHERE ENAME='MILLER';

ENAME                    TOTAL SALARY
------------------------ ------------
MILLER                           1300
```

14)

```
SQL> DELETE FROM EMP_TB WHERE ENAME='MILLER';

1 row deleted.

SQL> SELECT * FROM EMP_TB;
```

16)

```
QL> UPDATE EMP_TB SET SALARY=SALARY+COMMISSION;

4 rows updated.

QL> SELECT * FROM EMP_TB;

    EMPNO ENAME                  JOB              SALARY COMMISSION
--------- ---------------------- ------------ ---------- ----------
   DEPTNO DATE_JOIN
--------- ---------
     7369 SMITH                  CLERK              3600        800
       20 17-DEC-88

     7499 ALLEN                  SALESMAN           1900        300
       30 20-FEB-81

     7521 WARD                   SALESMAN           1280         30
          22-FEB-81
```

```
QL> ALTER TABLE EMP_TB DROP COLUMN COMMISSION;

able altered.

QL> SELECT * FROM EMP_TB;

    EMPNO ENAME                  JOB              SALARY     DEPTNO
--------- ---------------------- ------------ ---------- ----------
ATE_JOIN
--------
     7369 SMITH                  CLERK              3600         20
7-DEC-88

     7499 ALLEN                  SALESMAN           1900         30
0-FEB-81

     7521 WARD                   SALESMAN           1280
2-FEB-81


    EMPNO ENAME                  JOB              SALARY     DEPTNO
```

18)

```
QL> SELECT EMPNO AS "EMP_ID",ENAME AS "NAME" FROM EMP_TB;

   EMP_ID NAME
--------- -------------------------
     7369 SMITH
     7499 ALLEN
     7521 WARD
     7566 JONES
     7654 MARTIN
     7698 BLAKE
     7782 CLARK
     7788 SCOTT
     7839 KING
     7844 TURNER
     7876 ADAMS

   EMP_ID NAME
--------- -------------------------
     7900 JAMES
     7902 FORD
```

19)

```
SQL> RENAME EMP_TB TO EMPLOYEE;

Table renamed.

SQL>
```

20)

```
SQL> CREATE TABLE EMP_TAB AS SELECT EMPNO,ENAME,JOB FROM EMPLOYEE;

Table created.

SQL> SELECT * FROM EMP_TAB;

    EMPNO ENAME                     JOB
---------- ------------------------- ------------
     7369 SMITH                     CLERK
     7499 ALLEN                     SALESMAN
     7521 WARD                      SALESMAN
     7566 JONES                     MANAGER
     7654 MARTIN                    SALESMAN
     7698 BLAKE                     MANAGER
     7782 CLARK                     MANAGER
     7788 SCOTT                     ANALYST
     7839 KING                      PRESIDENT
     7844 TURNER                    SALESMAN
     7876 ADAMS                     CLERK

    EMPNO ENAME                     JOB
---------- ------------------------- ------------
     7900 JAMES                     CLERK
     7902 FORD                      ANALYST
```

22.

```
RA-00907: missing right parenthe:

QL> truncate table emp;
```

23.

```
SQL> delete table emp;
```