1. **Create an employee  table ‘EMP’ with following fields :**

empno                 NUMBER(2)

ename                 VARCHAR2(25)

job                     VARCHAR2(12)

salary                   NUMBER(10,2)

commission         NUMBER(7,2)

deptno                 NUMBER(2)

SQL> CREATE TABLE EMPL0YE(emp\_no NUMBER(2),ename VARCHAR(25),job VARCHAR(12),salary NUMBER(10,2),commission NUMBER(7,2),dept\_no NUMBER(2));

Table created.

1. **Display the structure of ‘EMP’**

SQL> describe EMPL0YE;

Name Null? Type

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

EMP\_NO NUMBER(2)

ENAME VARCHAR2(25)

JOB VARCHAR2(12)

SALARY NUMBER(10,2)

COMMISSION NUMBER(7,22)

DEPT\_NO NUMBER(2)

1. **Insert the following record into ‘EMP’**

**EMPNO      ENAME      JOB                    SAL       COMM         DEPTNO**

7369         SMITH           CLERK           2000             800                    20

SQL> alter table EMPL0YE modify(emp\_no NUMBER(4));

Table altered.

SQL> INSERT INTO EMPL0YE VALUES('7369','SMITH','CLERK','2000','800','20');

1 row created.

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO

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

7369 SMITH CLERK 2000 800 20

1. Insert the rest of records using substitution variable.

**EMPNO ENAME      JOB               SAL         COMM     DEPTNO**

7499 ALLEN      SALESMAN        1600       300          30

7521 WARD       SALESMAN        1250       500         30

7566 JONES      MANAGER         2975         20

7654 MARTIN     SALESMAN        1250         1400       30

7698 BLAKE      MANAGER         2850                   30

7782 CLARK      MANAGER         2450                     10

7788 SCOTT      ANALYST         3000                   20

7839 KING       PRESIDENT       5000                   10

1. TURNER     SALESMAN        1500                   30

7876 ADAMS      CLERK           1100                   20

7902 FORD ANALYST 3000 20

7934 MILLER CLERK 1300 10

SQL> INSERT INTO EMPL0YE VALUES('7499','ALLEN','SALES MAN','1600','300','30');

1 row created.

SQL> INSERT INTO EMPL0YE VALUES('7521','WARD','SALES MAN','1250','500','30');

1 row created.

SQL> INSERT INTO EMPL0YE (emp\_no,ename,job,salary,commission)VALUES('7566','JONES','MANAGER','2975','20');

1 row created.

SQL> INSERT INTO EMPL0YE (emp\_no,ename,job,salary,commission,dept\_no)VALUES('7654','MARTIN','SALESMAN','1250','1400','30');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7698','BLAKE','MANAGER','2850','30');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7782','CLARK','MANAGER','2450','10');

1 row created.

SQL> INSERT INTO EMPL0YE (emp\_no,ename,job,salary,dept\_no)VALUES('7839','KING','PRESIDENT','5000','10');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7844','TURNER','SALESMAN','1500','30');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7876','ADAMS','CLERK','1100','20');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7900','JAMES','NULL','950','30');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7902','FORD','ANALYST','3000','20');

1 row created.

SQL> INSERT INTO EMPL0YE(emp\_no,ename,job,salary,dept\_no)VALUES('7934','MILLER','CLERK','1300','10');

1 row created.

SQL> SELECT \* FROM EMPL0YE;

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO --------------- ------------------------- ------------ ---------- ---------- --------

7369 SMITH CLERK 2000 800 20

7499 ALLEN SALES MAN 1600 300 30

7521 WARD SALES MAN 1250 500 30

7566 JONES MANAGER 2975 20

7654 MARTIN SALESMAN 1250 1400 30

7698 BLAKE MANAGER 2850 30

7782 CLARK MANAGER 2450 10

7839 KING PRESIDENT 5000 10

7844 TURNER SALESMAN 1500 30

7876 ADAMS CLERK 1100 20

7900 JAMES NULL 950 30

7902 FORD ANALYST 3000 20

7934 MILLER CLERK 1300 10

13 rows selected.

**5. Insert job  as ‘CLERK’ for all ‘NULL’ job types.**

SQL> UPDATE EMPL0YE SET job='CLERK' WHERE job='NULL';

1 row updated.

**6.Add a new field  ‘date\_join’ with following values**

SQL> ALTER TABLE EMPL0YE ADD date\_join date;

Table altered.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='17-DEC-80' WHERE emp\_no=7369;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='20-FEB-81' WHERE emp\_no=7521;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='22-FEB-81' WHERE emp\_no=7566;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='02-APR-81' WHERE emp\_no=7654;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='28-SEP-81' WHERE emp\_no=7698;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='01-MAY-81' WHERE emp\_no=7782;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='09-JUN-81' WHERE emp\_no=7788;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='19-APR-87' WHERE emp\_no=7839;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='17-NOV-81' WHERE emp\_no=7844;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='08-SEP-81' WHERE emp\_no=7876;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='23-MAY-87' WHERE emp\_no=7900;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='03-DEC-81' WHERE emp\_no=7902;

1 row updated.

SQL> UPDATE EMPL0YE SET DATE\_JOIN='03-DEC-81' WHERE emp\_no=7934;

1 row updated.

1. **Display details of all employees.**

SQL> SELECT\*FROM EMPL0YE;

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO DATE\_JOIN

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

7369 SMITH CLERK 2000 800 20 17-DEC-80

7499 ALLEN SALES MAN 1600 300 30

7521 WARD SALES MAN 1250 500 30 20-FEB-81

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO DATE\_JOIN

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

7566 JONES MANAGER 2975 20 22-FEB-81

7654 MARTIN SALESMAN 1250 1400 30 02-APR-81

7698 BLAKE MANAGER 2850 30 28-SEP-81

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO DATE\_JOIN

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

7782 CLARK MANAGER 2450 10 01-MAY-81

7839 KING PRESIDENT 5000 20 19-APR-87

7844 TURNER SALESMAN 1500 10 17-NOV-81

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO DATE\_JOIN

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

7876 ADAMS CLERK 1100 20 08­-SEP-81

7900 JAMES CLERK 950 30 09SQL>

8. Display all the distinct job types in ‘EMP’.

SQL> SELECT DISTINCT JOB FROM EMPL0YE;

JOB

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

CLERK

SALESMAN

PRESIDENT

MANAGER

ANALYST

SALES MAN

6 rows selected.

9. Display names of all employees in dept 20 and 30

**SQL> SELECT ENAME FROM EMPL0YE WHERE dept\_no IN (20,30);**

**ENAME**

**-------------------------**

**SMITH**

**ALLEN**

**WARD**

**MARTIN**

**BLAKE**

**TURNER**

**ADAMS**

**JAMES**

**FORD**

**9 rows selected.**

**10. List name and Total of salary i.e sal+commission**

**SQL> SELECT ename,salary+commission FROM EMPL0YE;**

**ENAME SALARY+COMMISSION**

**------------------------- -----------------**

**SMITH 2800**

**ALLEN 1900**

**WARD 1750**

**JONES 2995**

**MARTIN 2650**

**BLAKE**

**CLARK**

**KING**

**TURNER**

**ADAMS**

**JAMES**

**ENAME SALARY+COMMISSION**

**------------------------- -----------------**

**FORD**

**MILLER**

**13 rows selected.**

**11. List name and Annual Salary i.e sal\*12**

**SQL> SELECT ename,salary\*12 FROM EMPL0YE;**

**ENAME SALARY\*12**

**------------------------- ----------**

**SMITH 24000**

**ALLEN 19200**

**WARD 15000**

**JONES 35700**

**MARTIN 15000**

**BLAKE 34200**

**CLARK 29400**

**KING 60000**

**TURNER 18000**

**ADAMS 13200**

**JAMES 11400**

**ENAME SALARY\*12**

**------------------------- ----------**

**FORD 36000**

**MILLER 15600**

**13 rows selected.**

**12. List the employee who joined in the date ‘03-DEC-81’**

SQL> SELECT \* FROM EMPL0YEE WHERE DATE\_JOIN='03-DEC-81';

EMPNO ENAME JOB SALARY COMMISSION DEPTNO DATE\_JOIN

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

7934 MILLER CLERK 1300 10 03-DEC-81

7902 FORD ANALYST 3000 20 03-DEC-81

13. Display the total salary of ‘Miller’

SQL> SELECT salary FROM EMPL0YE WHERE ename='MILLER';

SALARY

----------

1300

14. Delete the employee ‘Miller’ from’ EMP’

SQL> DELETE FROM EMPL0YE WHERE ename='MILLER';

1 row deleted.

**15. Display name and dept no of all employees**

SQL>

SQL> SELECT DISTINCT ename,dept\_no FROM EMPL0YE;

ENAME DEPT\_NO

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

SMITH 20

JONES

FORD 20

CLARK 10

TURNER 30

JAMES 30

KING 10

ADAMS 20

BLAKE 30

ALLEN 30

WARD 30

ENAME DEPT\_NO

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

MARTIN 30

12 rows selected.

**16. Remove the field ‘commission’ fom’EMP’ after updating salary with total salary, i.e sal+commission**

SQL> UPDATE EMPL0YE SET salary=salary+commission;

12 rows updated.

SQL> SELECT \* FROM EMPL0YE;

EMP\_NO ENAME JOB SALARY COMMISSION DEPT\_NO DATE\_JOIN

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

7369 SMITH CLERK 2800 800 20 17-DEC-80

7499 ALLEN SALES MAN 1900 300 30

7521 WARD SALES MAN 1750 500

30

EMP\_NO ENAME JOB SALARY COMMISSION

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

DEPT\_NO DATE\_JOIN

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

7566 JONES MANAGER 2995 20

7654 MARTIN SALESMAN 2650 1400

30

7698 BLAKE MANAGER

30

EMP\_NO ENAME JOB SALARY COMMISSION

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

DEPT\_NO DATE\_JOIN

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

7782 CLARK MANAGER

10

7839 KING PRESIDENT

10

7844 TURNER SALESMAN

30

EMP\_NO ENAME JOB SALARY COMMISSION

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

DEPT\_NO DATE\_JOIN

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

7876 ADAMS CLERK

20

7900 JAMES CLERK

30

7902 FORD ANALYST

20

12 rows selected.

**18.  Display the name and employee no as ‘name’ and ‘emp\_id’**

SQL> SELECT ename,emp\_no FROM EMPL0YE;

ENAME EMP\_NO

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

SMITH 7369

ALLEN 7499

WARD 7521

JONES 7566

MARTIN 7654

BLAKE 7698

CLARK 7782

KING 7839

TURNER 7844

ADAMS 7876

JAMES 7900

ENAME EMP\_NO

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

FORD 7902

1. rows selected.

**19. Rename table ‘EMP’ to ‘EMPLOYEE’**

SQL> RENAME EMPL0YE TO EMPLOYEE;

Table renamed.

**20. Create a new table ‘EMP\_TAB’ from table ‘EMPLOYEE’**

SQL> CREATE TABLE EMP\_TAB AS (SELECT \* FROM EMP);

Table created.

**21. List the details of ‘EMPLOYEE’ and ‘EMPTAB’**

EMPNO ENAME                     JOB              SALARY     DEPTNO

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

DATE\_JOIN

---------

      7369 SMITH                     CLERK              2800         20

17-DEC-80

      7499 ALLEN                     SALESMAN           1900         30

      7521 WARD                      SALESMAN           1750         30

20-FEB-81

     EMPNO ENAME                     JOB              SALARY     DEPTNO

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

DATE\_JOIN

---------

      7566 JONES                     MANAGER            2975         20

22-FEB-81

      7654 MARTIN                    SALESMAN           2650         30

02-APR-81

      7698 BLAKE                     MANAGER            2850         30

28-SEP-81

     EMPNO ENAME                     JOB              SALARY     DEPTNO

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

DATE\_JOIN

---------

      7782 CLARK                     MANAGER            2450         10

01-MAY-81

      7788 SCOTT                     ANALYST            3000         20

09-JUN-81

      7839 KING                      PRESIDENT          5000         10

19-APR-87

     EMPNO ENAME                     JOB              SALARY     DEPTNO

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

DATE\_JOIN

---------

      7844 TURNER                    SALESMAN           1500         30

17-NOV-81

      7876 ADAMS                     CLERK              1100         20

08-SEP-81

      7902 FORD                      ANALYST            3000         20

03-DEC-81

     EMPNO ENAME                     JOB              SALARY     DEPTNO

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

DATE\_JOIN

---------

      7900 JAMES                     CLERK               950         30

23-MAY-87

**22. Delete all records from ‘EMP’**

SQL> DELETE FROM EMP\_TAB;

1 row deleted.

**23.Delete the table ‘EMP’**

DROP TABLE EMP\_TAB;

Table dropped.