SQL> CREATE TABLE EMP ( EMPNO NUMBER(6),ENAME VARCHAR2(20),JOB VARCHAR2(10),MGR NUMBER(4),DEPTNO NUMBER(3),SAL NUMBER(7,2));

Table created.

SQL> ALTER TABLE EMP ADD COMMISSION NUMBER;

Table altered.

SQL> ALTER TABLE EMP MODIFY JOB VARCHAR2(15);

Table altered.

SQL> CREATE TABLE DEPT (DEPTNO NUMBER(2) PRIMARY KEY,DNAME VARCHAR2(10),LOC VARCHAR2(10));

Table created.

SQL> ALTER TABLE EMP ADD CONSTRAINT EMP\_PK PRIMARY KEY (EMPNO);

Table altered.

SQL> ALTER TABLE EMP ADD CONSTRAINT EMP\_DEPT\_FK FOREIGN KEY (DEPTNO) REFERENCES DEPT(DEPTNO);

Table altered.

SQL> ALTER TABLE EMP ADD CONSTRAINT EMP\_EMPNO\_CHECK CHECK (EMPNO > 100);

Table altered.

SQL> ALTER TABLE EMP MODIFY SAL DEFAULT 5000;

Table altered.

SQL> ALTER TABLE EMP ADD DOB DATE;

Table altered.

SQL> ALTER TABLE EMP ADD DOJ DATE;

Table altered.

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (10, 'MANAGEMENT', 'MAIN BLOCK');

1 row created.

SQL> ALTER TABLE DEPT MODIFY LOC VARCHAR2(20);

Table altered.

SQL> SELECT \* FROM DEPT;

DEPTNO DNAME LOC

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

10 MANAGEMENT MAIN BLOCK

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (60, 'MANUFACTURING', 'PROD BLOCK');

1 row created.

SQL> DELETE FROM DEPT WHERE DEPTNO = 10;

1 row deleted.

SQL> DELETE FROM DEPT WHERE DEPTNO = 10;

0 rows deleted.

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (10, 'MANUFACTURING', 'PROD BLOCK');

1 row created.

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (30, 'MAINTAINANCE', 'MAIN BLOCK');

1 row created.

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (40, 'TRANSPORT', 'ADMIN BLOCK');

1 row created.

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (50, 'SALES', 'HEAD OFFICE');

1 row created.

SQL> SELECT \* FROM DEPT;

DEPTNO DNAME LOC

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

60 MANUFACTURING PROD BLOCK

10 MANUFACTURING PROD BLOCK

30 MAINTAINANCE MAIN BLOCK

40 TRANSPORT ADMIN BLOCK

50 SALES HEAD OFFICE

SQL> INSERT INTO DEPT (DEPTNO, DNAME, LOC) VALUES (20, 'SALES', 'MAIN BLOCK');

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7369, 'SMITH', 'CLERK', 7566, TO\_DATE('17-Dec-80', 'DD-Mon-YY'), 8000, 1200, 20);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7399, 'ASANT', 'SALESMAN', 7566, TO\_DATE('20-Feb-81', 'DD-Mon-YY'), 1600, 300, 30);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7499, 'ALLEN', 'SALESMAN', 7698, TO\_DATE('20-Feb-81', 'DD-Mon-YY'), 1600, 300, 30);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7521, 'WARD', 'SALESMAN', 7698, TO\_DATE('22-Feb-82', 'DD-Mon-YY'), 1250, 500, 30);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7566, 'JONES', 'MANAGER', 7839, TO\_DATE('2-Apr-81', 'DD-Mon-YY'), 5975, 500, 20);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7698, 'BLAKE', 'MANAGER', 7839, TO\_DATE('1-May-79', 'DD-Mon-YY'), 9350, 1400, 30);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7611, 'SCOTT', 'HOD', 7839, TO\_DATE('12-Jun-76', 'DD-Mon-YY'), 3000, 900, 10);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7839, 'CLARK', 'CEO', 7422, TO\_DATE('16-Mar-72', 'DD-Mon-YY'), 9900, 800, 10);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7368, 'FORD', 'SUPERVIS', 7366, TO\_DATE('17-Dec-80', 'DD-Mon-YY'), 90000, 2200, 20);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7591, 'ALLEY', 'SALESMAN', 7698, TO\_DATE('20-Feb-81', 'DD-Mon-YY'), 1600, 300, 30);

1 row created.

SQL> INSERT INTO EMP (EMPNO, ENAME, JOB, MGR, DOB, SAL, COMMISSION, DEPTNO) VALUES(7421, 'DRANK', 'CLERK', 7698, TO\_DATE('22-Jan-82', 'DD-Mon-YY'), 1250, 500, 30);

1 row created.

SQL> UPDATE EMP SET COMMISSION = 1000 WHERE JOB = 'MANAGER';

2 rows updated.

SQL> DELETE FROM EMP WHERE JOB = 'SUPERVIS';

1 row deleted.

SQL> DELETE FROM EMP WHERE EMPNO = 7599;

0 rows deleted.

SQL> SELECT \* FROM EMP ORDER BY SAL ASC;

EMPNO ENAME JOB MGR DEPTNO SAL

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COMMISSION DOB DOJ

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7521 WARD SALESMAN 7698 30 1250

500 22-FEB-82

7421 DRANK CLERK 7698 30 1250

500 22-JAN-82

7591 ALLEY SALESMAN 7698 30 1600

300 20-FEB-81

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7399 ASANT SALESMAN 7566 30 1600

300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600

300 20-FEB-81

7611 SCOTT HOD 7839 10 3000

900 12-JUN-76

EMPNO ENAME JOB MGR DEPTNO SAL

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COMMISSION DOB DOJ

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

7566 JONES MANAGER 7839 20 5975

1000 02-APR-81

7369 SMITH CLERK 7566 20 8000

1200 17-DEC-80

7698 BLAKE MANAGER 7839 30 9350

1000 01-MAY-79

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7839 CLARK CEO 7422 10 9900

800 16-MAR-72

10 rows selected.

SQL> SELECT \* FROM EMP ORDER BY SAL DESC;

EMPNO ENAME JOB MGR DEPTNO SAL

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COMMISSION DOB DOJ

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

7839 CLARK CEO 7422 10 9900

800 16-MAR-72

7698 BLAKE MANAGER 7839 30 9350

1000 01-MAY-79

7369 SMITH CLERK 7566 20 8000

1200 17-DEC-80

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7566 JONES MANAGER 7839 20 5975

1000 02-APR-81

7611 SCOTT HOD 7839 10 3000

900 12-JUN-76

7499 ALLEN SALESMAN 7698 30 1600

300 20-FEB-81

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7399 ASANT SALESMAN 7566 30 1600

300 20-FEB-81

7591 ALLEY SALESMAN 7698 30 1600

300 20-FEB-81

7421 DRANK CLERK 7698 30 1250

500 22-JAN-82

EMPNO ENAME JOB MGR DEPTNO SAL

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COMMISSION DOB DOJ

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

7521 WARD SALESMAN 7698 30 1250

500 22-FEB-82

10 rows selected.

SQL> SELECT \* FROM EMP WHERE DEPTNO = 30;

EMPNO ENAME JOB MGR DEPTNO SAL

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COMMISSION DOB DOJ

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

7399 ASANT SALESMAN 7566 30 1600

300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600

300 20-FEB-81

7521 WARD SALESMAN 7698 30 1250

500 22-FEB-82

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7698 BLAKE MANAGER 7839 30 9350

1000 01-MAY-79

7591 ALLEY SALESMAN 7698 30 1600

300 20-FEB-81

7421 DRANK CLERK 7698 30 1250

500 22-JAN-82

6 rows selected.

SQL> SELECT DISTINCT DEPTNO FROM EMP;

DEPTNO

----------

20

30

10

SQL> SELECT \* FROM EMP ORDER BY ENAME ASC;

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7499 ALLEN SALESMAN 7698 30 1600

300 20-FEB-81

7591 ALLEY SALESMAN 7698 30 1600

300 20-FEB-81

7399 ASANT SALESMAN 7566 30 1600

300 20-FEB-81

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7698 BLAKE MANAGER 7839 30 9350

1000 01-MAY-79

7839 CLARK CEO 7422 10 9900

800 16-MAR-72

7421 DRANK CLERK 7698 30 1250

500 22-JAN-82

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7566 JONES MANAGER 7839 20 5975

1000 02-APR-81

7611 SCOTT HOD 7839 10 3000

900 12-JUN-76

7369 SMITH CLERK 7566 20 8000

1200 17-DEC-80

EMPNO ENAME JOB MGR DEPTNO SAL

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

COMMISSION DOB DOJ

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

7521 WARD SALESMAN 7698 30 1250

500 22-FEB-82

10 rows selected.

SQL> CREATE TABLE MANAGER AS SELECT \* FROM EMP WHERE JOB = 'MANAGER';

Table created.

SQL> SELECT ENAME FROM EMP WHERE COMMISSION IS NULL;

no rows selected

SQL> SELECT E.ENAME, D.DNAME FROM EMP E JOIN DEPT D ON E.DEPTNO = D.DEPTNO;

ENAME DNAME

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

SMITH SALES

ASANT MAINTAINANCE

ALLEN MAINTAINANCE

WARD MAINTAINANCE

JONES SALES

BLAKE MAINTAINANCE

SCOTT MANUFACTURING

CLARK MANUFACTURING

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

10 rows selected.