.....

SQL> SELECT EMPNO, ENAME, MGR

2 FROM EMP;

| EMPNO | ENAME  | MGR  |
|-------|--------|------|
|       |        |      |
| 7839  | KING   |      |
| 7698  | BLAKE  | 7839 |
| 7782  | CLARK  | 7839 |
| 7566  | JONES  | 7839 |
| 7654  | MARTIN | 7698 |
| 7499  | ALLEN  | 7698 |
| 7844  | TURNER | 7698 |
| 7900  | JAMES  | 7698 |
| 7521  | WARD   | 7698 |
| 7902  | FORD   | 7566 |
| 7369  | SMITH  | 7902 |
| 7788  | SCOTT  | 7566 |
| 7876  | ADAMS  | 7788 |
| 7934  | MILLER | 7782 |

14 rows selected.

SQL> SELECT DISTINCT MGR

2 FROM EMP;

| MGR  |  |
|------|--|
|      |  |
|      |  |
| 7839 |  |
| 7782 |  |
| 7698 |  |
| 7902 |  |
| 7566 |  |
| 7788 |  |

7 rows selected.

SQL> SELECT Empno, Ename, job, Deptno, MGR

- 2 FROM Emp
- 3 WHERE Empno IN(7839, 7782, 7698, 7902, 7566, 7788);

| EMPNO | ENAME | JOB       | DEPTNO | MGR  |
|-------|-------|-----------|--------|------|
|       |       |           |        |      |
| 7566  | JONES | MANAGER   | 20     | 7839 |
| 7698  | BLAKE | MANAGER   | 30     | 7839 |
| 7782  | CLARK | MANAGER   | 10     | 7839 |
| 7788  | SCOTT | ANALYST   | 20     | 7566 |
| 7839  | KING  | PRESIDENT | 10     |      |
| 7902  | FORD  | ANALYST   | 20     | 7566 |

6 rows selected.

SQL> ED

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- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE Empno IN(7839, 7782, 7698, 7902, 7566, 7788, NULL) SQL> /

| EMPNO | ENAME | JOB       | DEPTNO | MGR  |
|-------|-------|-----------|--------|------|
|       |       |           |        |      |
| 7566  | JONES | MANAGER   | 20     | 7839 |
| 7698  | BLAKE | MANAGER   | 30     | 7839 |
| 7782  | CLARK | MANAGER   | 10     | 7839 |
| 7788  | SCOTT | ANALYST   | 20     | 7566 |
| 7839  | KING  | PRESIDENT | 10     |      |
| 7902  | FORD  | ANALYST   | 20     | 7566 |

6 rows selected.

SQL> SELECT Empno, Ename, job, Deptno, MGR

- 2 FROM Emp
- 3 WHERE Empno IN(7839, 7782, 7698);

| EMPNO | ENAME          | JOB                | DEPTNO | MGR          |
|-------|----------------|--------------------|--------|--------------|
|       | BLAKE<br>CLARK | MANAGER<br>MANAGER | 30     | 7839<br>7839 |
| 7839  | KING           | PRESIDENT          | 10     |              |

SQL> ED

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- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE Empno NOT IN(7839, 7782, 7698)

SQL> /

| EMPNO | ENAME       | JOB      | DEPTNO | MGR  |
|-------|-------------|----------|--------|------|
|       | <del></del> |          |        |      |
| 7566  | JONES       | MANAGER  | 20     | 7839 |
| 7654  | MARTIN      | SALESMAN | 30     | 7698 |
| 7499  | ALLEN       | SALESMAN | 30     | 7698 |
| 7844  | TURNER      | SALESMAN | 30     | 7698 |
| 7900  | JAMES       | CLERK    | 30     | 7698 |
| 7521  | WARD        | SALESMAN | 30     | 7698 |
| 7902  | FORD        | ANALYST  | 20     | 7566 |
| 7369  | SMITH       | CLERK    | 20     | 7902 |
| 7788  | SCOTT       | ANALYST  | 20     | 7566 |
| 7876  | ADAMS       | CLERK    | 20     | 7788 |
| 7934  | MILLER      | CLERK    | 10     | 7782 |

11 rows selected.

SQL> ED

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- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE Empno NOT IN(7839, 7782, 7698, NULL) SQL> /

no rows selected

SQL> --When A List is Compared With "NOT IN" Operator, if The List Contains, At-Least One NULL Then The Overall Result Of The Query Becomes "no Rows Selected"
SQL>

SQL> SELECT Empno, Ename, job, Deptno, MGR

- 2 FROM Emp
- 3 WHERE MGR IN(7839, 7782, 7698, 7902, 7566, 7788);

| EMPNO | ENAME  | JOB       | DEPTNO | MGR  |
|-------|--------|-----------|--------|------|
|       |        |           |        |      |
| 7698  | BLAKE  | MANAGER   | 30     | 7839 |
| 7782  | CLARK  | MANAGER   | 10     | 7839 |
| 7566  | JONES  | MANAGER   | 20     | 7839 |
| 7654  | MARTIN | SALESMAN  | 30     | 7698 |
| 7499  | ALLEN  | SALESMAN  | 30     | 7698 |
| 7844  | TURNER | SALESMAN  | 30     | 7698 |
| 7900  | JAMES  | CLERK     | 30     | 7698 |
| 7521  | WARD   | SALESMAN  | 30     | 7698 |
| 7902  | FORD   | ANALYST 🙏 | 20     | 7566 |
| 7369  | SMITH  | CLERK     | 20     | 7902 |
| 7788  | SCOTT  | ANALYST   | 20     | 7566 |
| 7876  | ADAMS  | CLERK     | 20     | 7788 |
| 7934  | MILLER | CLERK     | 10     | 7782 |

13 rows selected.

SQL> ED

Wrote file afiedt.buf

- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE MGR IN(7839, 7782, 7698)

SQL> /

| EMPNO | ENAME  | JOB      | DEPTNO | MGR  |
|-------|--------|----------|--------|------|
|       |        |          |        |      |
| 7698  | BLAKE  | MANAGER  | 30     | 7839 |
| 7782  | CLARK  | MANAGER  | 10     | 7839 |
| 7566  | JONES  | MANAGER  | 20     | 7839 |
| 7654  | MARTIN | SALESMAN | 30     | 7698 |
| 7499  | ALLEN  | SALESMAN | 30     | 7698 |
| 7844  | TURNER | SALESMAN | 30     | 7698 |
| 7900  | JAMES  | CLERK    | 30     | 7698 |
| 7521  | WARD   | SALESMAN | 30     | 7698 |

7934 MILLER CLERK 10 7782

9 rows selected.

SQL> ED

Wrote file afiedt.buf

- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE MGR NOT IN(7839, 7782, 7698)

SQL> /

| EMPNO | ENAME | JOB     | DEPTNO | MGR  |
|-------|-------|---------|--------|------|
| 7902  | FORD  | ANALYST | 20     | 7566 |
| 7369  | SMITH | CLERK   | 20     | 7902 |
| 7788  | SCOTT | ANALYST | 20     | 7566 |
| 7876  | ADAMS | CLERK   | 20     | 7788 |

SQL> ED

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- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE MGR IN (7839, 7782, 7698, NULL)

SQL> /

| EMPNO | ENAME    | JOB      | 7 | DEPTNO | MGR  |
|-------|----------|----------|---|--------|------|
|       |          |          |   |        |      |
| 7698  | BLAKE    | MANAGER  |   | 30     | 7839 |
| 7782  | CLARK    | MANAGER  |   | 10     | 7839 |
| 7566  | JONES    | MANAGER  |   | 20     | 7839 |
| 7654  | MARTIN   | SALESMAN |   | 30     | 7698 |
| 7499  | ALLEN    | SALESMAN |   | 30     | 7698 |
| 7844  | TURNER A | SALESMAN |   | 30     | 7698 |
| 7900  | JAMES    | CLERK    |   | 30     | 7698 |
| 7521  | WARD     | SALESMAN |   | 30     | 7698 |
| 7934  | MILLER   | CLERK    |   | 10     | 7782 |

9 rows selected.

SQL> ED

Wrote file afiedt.buf

- 1 SELECT Empno, Ename, job, Deptno, MGR
- 2 FROM Emp
- 3\* WHERE MGR NOT IN(7839, 7782, 7698, NULL)

no rows selected

SQL> SELECT E.Ename

2 FROM Emp E

```
3 WHERE E.Empno IN
  4 (
  5 SELECT M.MGR
  6 FROM EMP M
  7);
ENAME
JONES
BLAKE
CLARK
SCOTT
KING
FORD
6 rows selected.
SQL> ED
Wrote file afiedt.buf
 1 SELECT E.Ename
  2 FROM Emp E
  3 WHERE E.Empno NOT IN
  4
  5 SELECT M.MGR
  6 FROM EMP M
 7*)
SQL> /
no rows selected
SQL> ED
Wrote file afiedt.buf
 1 SELECT E.Ename
 2 FROM Emp E
  3 WHERE E.Empno NOT IN
  5 SELECT NVL (M.MGR, 0)
  6
    FROM EMP M
  7*
SQL>
ENAME
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS
JAMES
MILLER
```

,

8 rows selected.

SQL> ED

Wrote file afiedt.buf

- 1 SELECT E.Ename
- 2 FROM Emp E
- 3 WHERE E.Empno NOT IN
- l (
- 5 SELECT M.MGR
- 6 FROM EMP M
- 7 WHERE M.MGR IS NOT NULL

8\* ) SQL> /

ENAME

-----

SMITH

ALLEN

WARD

MARTIN

TURNER

ADAMS

**JAMES** 

MILLER

8 rows selected.

SQL> SELECT EMPNO, ENAME, MGR, SAL, COMM

2 FROM EMP;

| 7839 KING 5000          |     |
|-------------------------|-----|
|                         |     |
| 7698 BLAKE 7839 2850    |     |
| 7782 CLARK 7839 2450    |     |
| 7566 JONES 7839 2975    |     |
| 7654 MARTIN 7698 1250 1 | 400 |
| 7499 ALLEN 7698 1600    | 300 |
| 7844 TURNER 7698 1500   | 0   |
| 7900 JAMES 7698 950     |     |
| 7521 WARD 7698 1250     | 500 |
| 7902 FORD 7566 3000     |     |
| 7369 SMITH 7902 800     |     |
| 7788 SCOTT 7566 3000    |     |
| 7876 ADAMS 7788 1100    |     |
| 7934 MILLER 7782 1300   |     |

14 rows selected.

SQL> SELECT EMPNO, ENAME, MGR, SAL, COMM

2 FROM EMP

3 WHERE COMM IN(1400,300,500,0);

| EMPNO | ENAME  | MGR  | SAL  | COMM |
|-------|--------|------|------|------|
| 7654  | MARTIN | 7698 | 1250 | 1400 |
| 7499  | ALLEN  | 7698 | 1600 | 300  |
| 7844  | TURNER | 7698 | 1500 | 0    |
| 7521  | WARD   | 7698 | 1250 | 500  |

- 2 FROM EMP
- 3 WHERE COMM IN(1400,300);

|          | 7844   | TURNER   | 7698         | 1500         | 0    |  |
|----------|--------|--|--------------|--------------|------|--|
|          | 7521   | WARD   | 7698         | 1250         | 500  |  |
| SQL> 2 3 | FROM 1 | FEMPNO, ENAME, MGR<br>EMP<br>COMM IN (1400, 300) |              |              |      |  |
|          | EMPNO  | ENAME  | MGR          | SAL          | COMM |  |
|          |        | MARTIN<br>ALLEN                                  | 7698<br>7698 | 1250<br>1600 | 1400 |  |
| SQL> 2 3 | FROM 1 | I EMPNO, ENAME, MGR<br>EMP<br>COMM IN(1400,300   |              | A            | 25   |  |
|          | EMPNO  | ENAME  | MGR          | SAL          | COMM |  |
|          | 7654   | MARTIN   | 7698         | 1250         | 1400 |  |

- 2 FROM EMP
- 3 WHERE COMM IN(1400,300,NULL);

| EMPNO | ENAME  | MGR  | SAL  | COMM |
|-------|--------|------|------|------|
| 7654  | MARTIN | 7698 | 1250 | 1400 |
| 7499  | ALLEN  | 7698 | 1600 | 300  |

SQL> SELECT EMPNO, ENAME, MGR, SAL, COMM

- 2 FROM EMP
- 3 WHERE COMM NOT IN (1400, 300)

| EMPNO | ENAME  |       | MGR  | SAL   | COMM |
|-------|--------|-------|------|-------|------|
| 7044  |        | <br>A | 7600 | 1.500 |      |
| /844  | TURNER |       | 1698 | 1500  | Ü    |
| 7521  | WARD   |       | 7698 | 1250  | 500  |

SQL> SELECT EMPNO, ENAME, MGR, SAL, COMM

- 2 FROM EMP
- 3 WHERE COMM NOT IN(1400,300,NULL);

no rows selected

SQL> ED

Wrote file afiedt.buf

- 1 SELECT EMPNO, ENAME, MGR, SAL, COMM
- 2 FROM EMP
- 3 WHERE COMM IN
- 4 (
- 5 SELECT COMM
- 6 FROM EMP
- 7\*)

SQL> /

| EMPNO   | ENAME                       | MGR                          | SAL                          | COMM   |  |
|---|-----------------------------|------------------------------|------------------------------|--|--|
| 7499<br>7844                                    | MARTIN ALLEN TURNER WARD    | 7698<br>7698<br>7698<br>7698 | 1250<br>1600<br>1500<br>1250 | 1400<br>300<br>0<br>500  |  |
| SQL> ED<br>Wrote file                           | afiedt.buf                  |                              |                              |  |  |
| 2 FROM I  | COMM NOT IN                 | R,SAL,COMM                   |                              | So Contract of the contract of |  |
| no rows se                                      | lected                      |                              |                              | 27   |  |
| SQL> ED<br>Wrote file                           | afiedt.buf                  |                              |                              |  |  |
| 2 FROM I<br>3 WHERE<br>4 (                      | COMM NOT IN CT NVL(COMM, 0) | R, SAL, COMM                 |                              |  |  |
| no rows se                                      | lected                      |                              |                              |  |  |
| SQL> ed<br>Wrote file                           | afiedt.buf                  |                              |                              |  |  |
| 2 FROM I<br>3 WHERE<br>4 (<br>5 SELEC<br>6 FROM | COMM NOT IN                 |                              |                              |  |  |
| no rows se                                      | lected                      |                              |                              |  |  |

SQL> SPOOL OFF