

SQL> desc emp

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

SQL> select * from emp;

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
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20
7839	KING	PRESIDENT		17-NOV-81	5000		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500		30
7876	ADAMS	CLERK	7788	12-JAN-83	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

14 rows selected.

Logical Operators:

Logical Operators are used to perform logical operations like logical AND, logical OR, logical NOT.

- AND
- OR
- NOT

ORACLE SQL provides 3 Logical Operators. They are:

AND, OR are used to separate multiple relational conditions.

Examples on AND, OR:

Q Display all MANAGERS and CLERKS records:

```
SQL> SELECT * FROM EMP WHERE JOB='MANAGER' OR JOB='CLERK';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7876	ADAMS	CLERK	7788	12-JAN-83	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		

```
30
  7934 MILLER   CLERK       7782 23-JAN-82   1300
10
```

7 rows selected.

Q Display the emp records whose names are:
ALLEN, BLAKE and MILLER:

```
SQL> SELECT * FROM EMP WHERE ENAME='BLAKE' OR ENAME='MILLER' OR
ENAME='ALLEN';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7934	MILLER	CLERK	7782	23-JAN-82	1300	10	

Q Display the emp records whose empnos are:
7521, 7698, 7788

```
SQL> SELECT * FROM EMP WHERE EMPNO=7521 OR EMPNO=7698 OR EMPNO=7788;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20

Q Display the emp records who are working in deptno 10 and 30:

SQL> SELECT * FROM EMP WHERE DEPTNO=10 OR DEPTNO=30;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
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
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7839	KING	PRESIDENT		17-NOV-81	5000	10	
7844	TURNER	SALESMAN	7698	08-SEP-81	1500		30
7900	JAMES	CLERK	7698	03-DEC-81	950	30	
7934	MILLER	CLERK	7782	23-JAN-82	1300	10	

Q Display the emp records whose salary is 2000 or more and 3000 or less (or)

display the emp records whose salary is between 2000 and 3000:

```
SQL> SELECT * FROM EMP WHERE SAL>=2000 AND SAL<=3000 ORDER BY SAL;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7782	CLARK	MANAGER	7839	09-JUN-81	2450	10	
7698	BLAKE	MANAGER	7839	01-MAY-81	2850	30	
7566	JONES	MANAGER	7839	02-APR-81	2975	20	
7902	FORD	ANALYST	7566	03-DEC-81	3000	20	
7788	SCOTT	ANALYST	7566	09-DEC-82	3000	20	

Q Display the emp records who joined in 1982:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566	09-DEC-82	3000	20	
7934	MILLER	CLERK	7782	23-JAN-82	1300	10	

Q Display the managers records who are earning more than 2500:

```
SQL> SELECT * FROM EMP WHERE JOB='MANAGER' AND SAL>=2500;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7566	JONES	MANAGER	7839	02-APR-81	2975	20	
7698	BLAKE	MANAGER	7839	01-MAY-81	2850	30	

Q Display the managers records who joined after april 1981:

```
SQL> SELECT * FROM EMP WHERE JOB='MANAGER' AND HIREDATE>'30-APR-1981';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10

Q Display all managers who are earning more than 2500 and who joined after april 1981:

```
SQL> SELECT * FROM EMP WHERE JOB='MANAGER' AND SAL>=2500 AND HIREDATE>'30-APR-1981';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30

Not:

it is used to perform logical NOT operations.

condition NOT(condition)

T NOT(T) => F

F NOT(F) => T

Q Display all emp records except managers:

```
SQL> SELECT * FROM EMP WHERE NOT(JOB='MANAGER')
2 ;
```

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
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7788	SCOTT	ANALYST	7566	09-DEC-82	3000	20	
7839	KING	PRESIDENT		17-NOV-81	5000	10	
7844	TURNER	SALESMAN	7698	08-SEP-81	1500		30
7876	ADAMS	CLERK	7788	12-JAN-83	1100	20	
7900	JAMES	CLERK	7698	03-DEC-81	950	30	
7902	FORD	ANALYST	7566	03-DEC-81	3000	20	
7934	MILLER	CLERK	7782	23-JAN-82	1300	10	

Q Display all emp records except deptno 10 and 30 emps:

```
SQL> SELECT * FROM EMP WHERE NOT(DEPTNO=10 OR DEPTNO=30);
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	800	20	
7566	JONES	MANAGER	7839	02-APR-81	2975	20	
7788	SCOTT	ANALYST	7566	09-DEC-82	3000	20	
7876	ADAMS	CLERK	7788	12-JAN-83	1100	20	

7902 FORD

ANALYST

7566 03-DEC-81

3000

20