SQL - LOGICAL OPERATORS

Consider CUSTOMERS table has following records:

```
SQL> SELECT * FROM CUSTOMERS;
+----+----------+-----+-----------+----------+
| ID | NAME     | AGE | ADDRESS   | SALARY   |
+----+----------+-----+-----------+----------+
|  1 | Ramesh   |  32 | Ahmedabad |  2000.00 |
|  2 | Khilan   |  25 | Delhi     |  1500.00 |
|  3 | kaushik  |  23 | Kota      |  2000.00 |
|  4 | Chaitali |  25 | Mumbai    |  6500.00 |
|  5 | Hardik   |  27 | Bhopal    |  8500.00 |
|  6 | Komal    |  22 | MP        |  4500.00 |
|  7 | Muffy    |  24 | Indore    | 10000.00 |
+----+----------+-----+-----------+----------+
7 rows in set (0.00 sec)
```

Here are simple examples showing usage of SQL Comparison Operators:

```
SQL> SELECT * FROM CUSTOMERS WHERE AGE >= 25 AND SALARY >= 6500;
+----+----------+-----+---------+---------+
| ID | NAME     | AGE | ADDRESS | SALARY  |
+----+----------+-----+---------+---------+
|  4 | Chaitali |  25 | Mumbai  | 6500.00 |
|  5 | Hardik   |  27 | Bhopal  | 8500.00 |
+----+----------+-----+---------+---------+
2 rows in set (0.00 sec)


SQL> SELECT * FROM CUSTOMERS WHERE AGE >= 25 OR SALARY >= 6500;
+----+----------+-----+-----------+----------+
| ID | NAME     | AGE | ADDRESS   | SALARY   |
+----+----------+-----+-----------+----------+
|  1 | Ramesh   |  32 | Ahmedabad |  2000.00 |
|  2 | Khilan   |  25 | Delhi     |  1500.00 |
|  4 | Chaitali |  25 | Mumbai    |  6500.00 |
|  5 | Hardik   |  27 | Bhopal    |  8500.00 |
|  7 | Muffy    |  24 | Indore    | 10000.00 |
+----+----------+-----+-----------+----------+
5 rows in set (0.00 sec)

SQL>  SELECT * FROM CUSTOMERS WHERE AGE IS NOT NULL;
+----+----------+-----+-----------+----------+
| ID | NAME     | AGE | ADDRESS   | SALARY   |
+----+----------+-----+-----------+----------+
|  1 | Ramesh   |  32 | Ahmedabad |  2000.00 |
|  2 | Khilan   |  25 | Delhi     |  1500.00 |
|  3 | kaushik  |  23 | Kota      |  2000.00 |
|  4 | Chaitali |  25 | Mumbai    |  6500.00 |
|  5 | Hardik   |  27 | Bhopal    |  8500.00 |
|  6 | Komal    |  22 | MP        |  4500.00 |
|  7 | Muffy    |  24 | Indore    | 10000.00 |
+----+----------+-----+-----------+----------+
7 rows in set (0.00 sec)

SQL> SELECT * FROM CUSTOMERS WHERE NAME LIKE 'Ko%';
+----+-------+-----+---------+---------+
| ID | NAME  | AGE | ADDRESS | SALARY  |
+----+-------+-----+---------+---------+
|  6 | Komal |  22 | MP      | 4500.00 |
+----+-------+-----+---------+---------+
1 row in set (0.00 sec)

SQL> SELECT * FROM CUSTOMERS WHERE AGE IN ( 25, 27 );
+----+----------+-----+---------+---------+
```

```
| ID | NAME     | AGE | ADDRESS | SALARY   |
+----+----------+-----+---------+---------+
|  2 | Khilan   |  25 | Delhi   | 1500.00 |
|  4 | Chaitali |  25 | Mumbai  | 6500.00 |
|  5 | Hardik   |  27 | Bhopal  | 8500.00 |
+----+----------+-----+---------+---------+
3 rows in set (0.00 sec)

SQL> SELECT * FROM CUSTOMERS WHERE AGE BETWEEN 25 AND 27;
+----+----------+-----+---------+---------+
| ID | NAME     | AGE | ADDRESS | SALARY   |
+----+----------+-----+---------+---------+
|  2 | Khilan   |  25 | Delhi   | 1500.00 |
|  4 | Chaitali |  25 | Mumbai  | 6500.00 |
|  5 | Hardik   |  27 | Bhopal  | 8500.00 |
+----+----------+-----+---------+---------+
3 rows in set (0.00 sec)

SQL> SELECT AGE FROM CUSTOMERS
WHERE EXISTS (SELECT AGE FROM CUSTOMERS WHERE SALARY > 6500);
+-----+
| AGE |
+-----+
|  32 |
|  25 |
|  23 |
|  25 |
|  27 |
|  22 |
|  24 |
+-----+
7 rows in set (0.02 sec)

SQL> SELECT * FROM CUSTOMERS
WHERE AGE > ALL (SELECT AGE FROM CUSTOMERS WHERE SALARY > 6500);
+----+--------+-----+-----------+---------+
| ID | NAME   | AGE | ADDRESS   | SALARY   |
+----+--------+-----+-----------+---------+
|  1 | Ramesh |  32 | Ahmedabad | 2000.00 |
+----+--------+-----+-----------+---------+
1 row in set (0.02 sec)

SQL> SELECT * FROM CUSTOMERS
WHERE AGE > ANY (SELECT AGE FROM CUSTOMERS WHERE SALARY > 6500);
+----+----------+-----+-----------+---------+
| ID | NAME     | AGE | ADDRESS   | SALARY   |
+----+----------+-----+-----------+---------+
|  1 | Ramesh   |  32 | Ahmedabad | 2000.00 |
|  2 | Khilan   |  25 | Delhi     | 1500.00 |
|  4 | Chaitali |  25 | Mumbai    | 6500.00 |
|  5 | Hardik   |  27 | Bhopal    | 8500.00 |
+----+----------+-----+-----------+---------+
4 rows in set (0.00 sec)
```