

FILTERING DATA

(OPERATORS USED INSIDE WHERE CLAUSE)

Compare two Things!

Comparison Operators



Condition →

Expression

Operator

Expression

Column1 = Column2

First_name = Last_name

Column1 = Value

First_name = 'John'

Function = Value

UPPER (First_name) = 'JOHN'

Expression = value

Price * Quantity = 1000

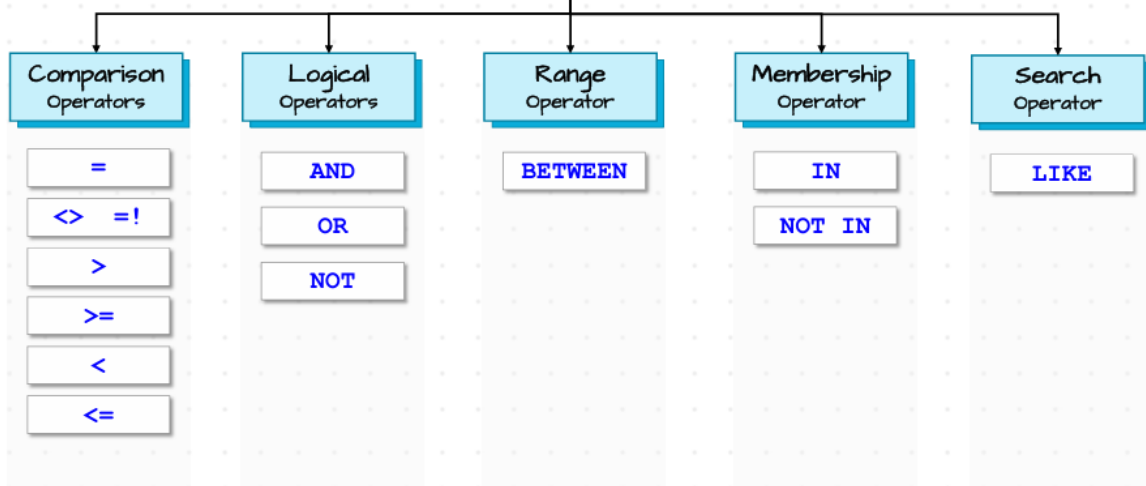
Subquery = value
Advanced

(SELECT AVG(sales)
FROM orders) = 1000

SQL Course | Filtering Data | Comparison Operators



WHERE operators



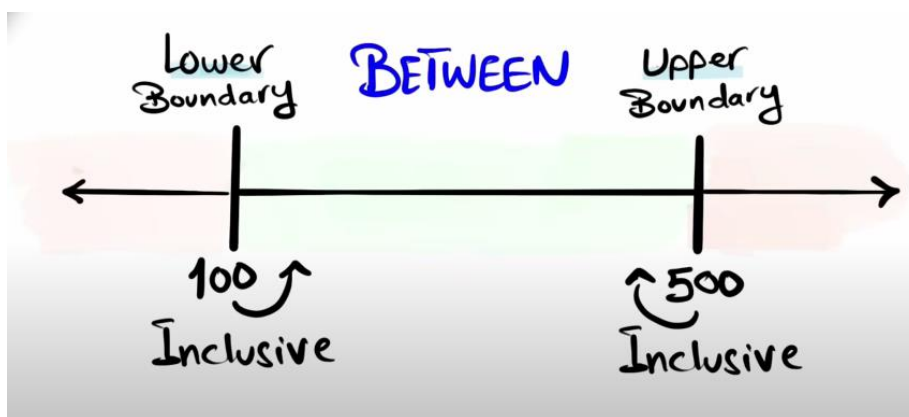
SQL Course | Filtering Data

QUERY 1: Retrieve all customers with a score not less than 500.

```
SELECT *  
FROM customers  
WHERE NOT score < 500
```

	id	first_name	country	score
1	2	John	USA	900
2	3	Georg	UK	750
3	4	Martin	Germany	500

BETWEEN OPERATOR(RANGE OPERATOR): Check if a value is in range



QUERY 1: RETRIEVE ALL CUSTOMERS WHOSE SCORE FALL IN THE RANGE BETWEEN 100 AND 500.

```
SELECT *  
FROM customers  
WHERE score BETWEEN 100 and 500
```

	id	first_name	country	score
1	1	Maria	Germany	350
2	4	Martin	Germany	500

It's same like using a comparison operator and logical operator.(SAME RESULTS AS ABOVE)

```
SELECT *  
FROM customers  
WHERE score >=100 AND score <=500
```

	id	first_name	country	score
1	1	Maria	Germany	350
2	4	Martin	Germany	500

Preferable method is this, because it is clearly visible both boundaries are included ($\geq 100, \leq 500$), whereas between it is confusing by seeing the values.

MEMBERSHIP OPERATOR: IN and NOT IN (Check if a value exists in a list.)

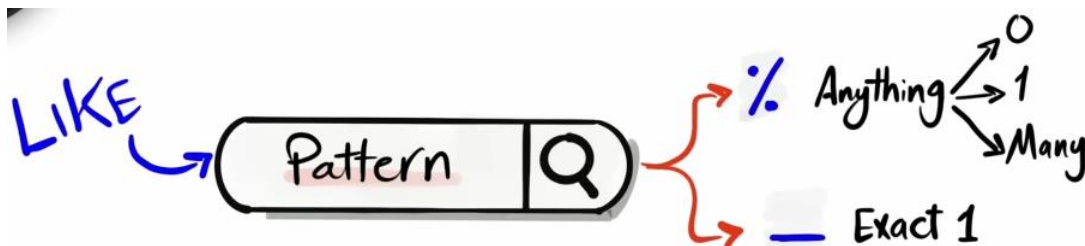
QUERY 1: RETRIEVE ALL CUSTOMERS FROM EITHER GERMANY OR USA

```
SELECT *  
FROM customers  
WHERE country IN('Germany', 'USA')
```

```
SELECT *  
FROM customers  
WHERE country = 'Germany' OR country = 'USA'
```

Use IN instead of OR for multiple values in the same column (in our case we are using only country column to filter) to simplify SQL.

SEARCH OPERATOR: LIKE (Search for a pattern in our text).



<div><div>M %</div><div>1Any</div></div>	<div><div>% in</div><div>Any</div></div>	<div><div>% r %</div><div>AnyAny</div></div>	<div><div><div>1</div><div>2</div><div>b %</div></div><div>Any</div></div>
✓ <u>M</u> aria	✓ Mart <u>i</u> n	✓ <u>M</u> aria	✓ Al <u>b</u> ert
✓ <u>Ma</u>	✓ <u>V</u> in	✓ <u>P</u> eter	✓ <u>R</u> ob
✓ <u>M</u>	✓ <u>i</u> n	✓ <u>R</u> ayn	✓ <u>A</u> bel
✗ <u>E</u> mma	✗ <u>J</u> asmine	✓ <u>R</u>	✗ <u>An</u> _
		✗ <u>A</u> lice	

QUERY 1: FIND ALL THE CUSTOMERS WHOSE FIRST NAME START WITH 'M'.

```
SELECT *  
FROM customers  
WHERE first_name LIKE 'M%'
```

	id	first_name	country	score
1	1	Maria	Germany	350
2	4	Martin	Germany	500

QUERY2: FIND ALL CUSTOMERS WHOSE FIRST NAME END WITH 'n':

```
SELECT *  
FROM customers  
WHERE first_name LIKE '%n'
```

	id	first_name	country	score
1	2	John	USA	900
2	4	Martin	Germany	500

QUERY 3: FINAL ALL CUSTOMERS WHOSE FIRST NAME CONTAIN 'r':

```
SELECT *  
FROM customers  
WHERE first_name LIKE '%r%'
```

	id	first_name	country	score
1	1	Maria	Germany	350
2	3	Georg	UK	750
3	4	Martin	Germany	500
4	5	Peter	USA	0

QUERY 4: FIND ALL THE CUSTOMERS WHOSE FIRST NAME HAS 'r':

```
SELECT *  
FROM customers  
WHERE first_name LIKE '__r%'
```

	id	first_name	country	score
1	1	Maria	Germany	350
2	4	Martin	Germany	500