

# 1. THE AND, OR and NOT OPERATOR

## LOGICAL OPERATORS (AND, OR, AND NOT)

- **AND** : Joins two or more conditions, and returns results only when all of the conditions are true.
- **OR** : Joins two or more conditions, and returns results when any of the conditions are true.
- **NOT** : Negates the expression that follows it.

## LOGICAL OPERATORS (AND, OR, AND NOT)

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- OR : Joins two or more conditions, and returns results when any of the conditions are true.
- NOT : Negates the expression that follows it.

## "AND" Logical Operator Syntax

- `SELECT column1, column2, ...`  
`FROM table_name`  
`WHERE condition1 AND condition2 AND condition3`  
`...;`

## When to use "AND" Logical Operator?

- If you want to select rows that must satisfy all the given conditions, you can use the logical operator, AND.

## "OR" Logical Operator Syntax

- `SELECT column1, column2, ...`  
`FROM table_name`  
`WHERE condition1 OR condition2 OR condition3 ...;`



## When to use "OR" Logical Operator?

- If you want to select rows that satisfy at least one of the given conditions, you can use the logical operator, OR.

## "NOT" Logical Operator Syntax

- `SELECT column1, column2, ...  
FROM table_name  
WHERE NOT condition;`



## When to use "NOT" Logical Operator?

- If you want to find rows that do not satisfy a condition, you can use the logical operator, NOT. NOT results in the reverse of a condition. That is, if a condition is satisfied, then the row is not returned.



# TRUTH TABLE

P	Q	$P \vee Q$
T	T	T
T	F	T
F	T	T
F	F	F



<b>P</b>	<b>Q</b>	<b><math>P \wedge Q</math></b>
<b>T</b>	<b>T</b>	<b>T</b>
<b>T</b>	<b>F</b>	<b>F</b>
<b>F</b>	<b>T</b>	<b>F</b>
<b>F</b>	<b>F</b>	<b>F</b>

# **TRUTH TABLE**

**P**

**$\sim P$**

**T**

**F**

**F**

**T**



AND

OR

NOT

