
Introduction

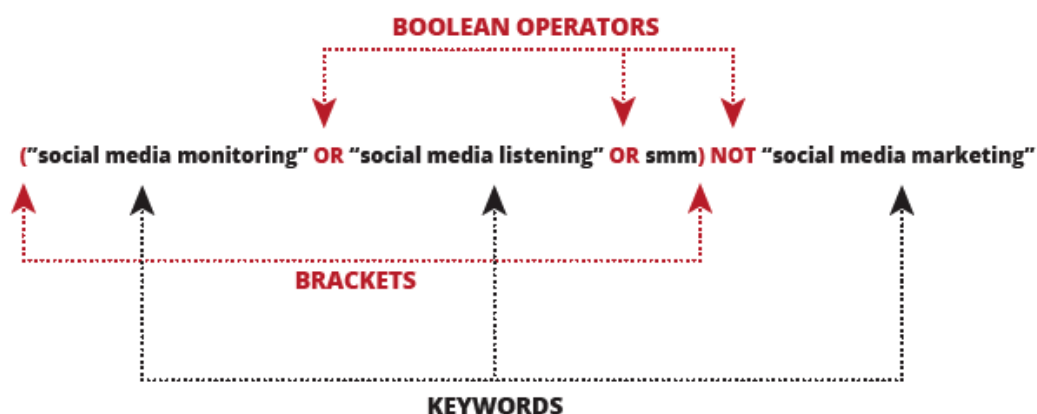
Searching through social listening data can sometimes feel like a daunting task. With millions of posts, how can you be sure your searches are finding the right results? Searches that use Boolean logic are simple and effective ways to search through massive amounts of data for certain words or phrases.

Before we jump into how to search using Boolean logic, it's helpful to understand a few keywords and ideas:

1. Writing an effective **search query** helps define the quality and volume of your results
 2. Using **keywords and Boolean operators** such as AND, OR, NOT, and NEAR, allows you to restrict or widen searches to find the most relevant results
 3. Guide your Boolean logic by using **parentheses** (remember those high school math classes and how parentheses guided your mathematical formulas)
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Example Search Query

Search queries can include one or more of the following elements, depending on what you are trying to find. The search query below shows a query built with **keywords**, **Boolean operators** and **parentheses**.



Reading queries to understand what they are searching for is pretty intuitive. In our example above, we are searching for content mentioning either *social media monitoring*, or *social media listening*, or *smm*, but we are excluding content that mentions *social media marketing*.

Keywords

Keywords are the words that you are looking for in a search. They are chosen based on the topic you are researching. In our previous example, the keywords we were looking for were *social media monitoring*, *social media listening*, and *smm*.

The rules for using **keywords** are:

1. Keywords must always be in lower-case
2. If your keyword is a multi-word phrase like *social media monitoring*, it must be enclosed with quotation marks like in our example
3. Synthesio supports a limited set of special characters (#, @, &, +, -, _) which can be a part of your keyword. If your keyword contains any other special characters, the unsupported characters should simply be replaced with a space. For example, *yes/no* should be written as "yes no".

Boolean Operators

Boolean operators are words that provide a search engine with some rules to use when searching a database. Using boolean operators in your queries will help ensure you are finding the data most relevant to your research.

The most commonly used Boolean operators are:



The rules for using **Boolean operators** are:

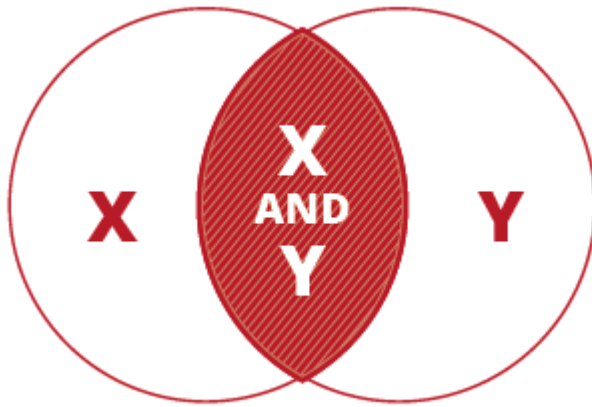
1. Operators must always be written in UPPER-CASE
2. An operator cannot be right next to another operator (for example, AND NOT)

Now that we have reviewed the rules for operators, we can review how each of them works.

AND

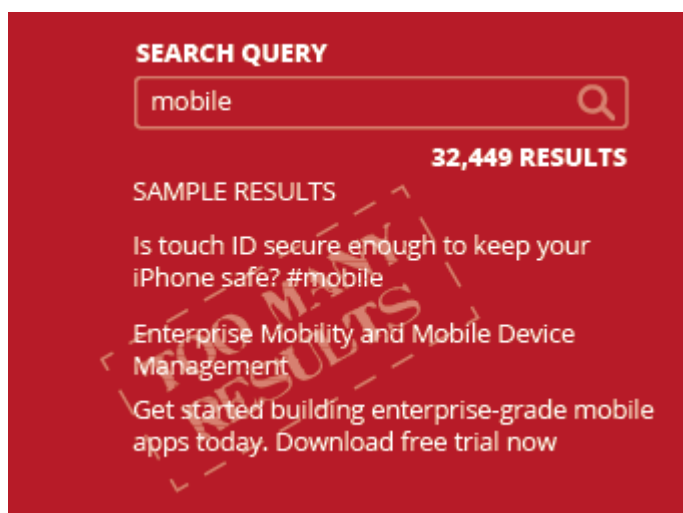
AND means that **both** keywords must be present.

X AND Y:

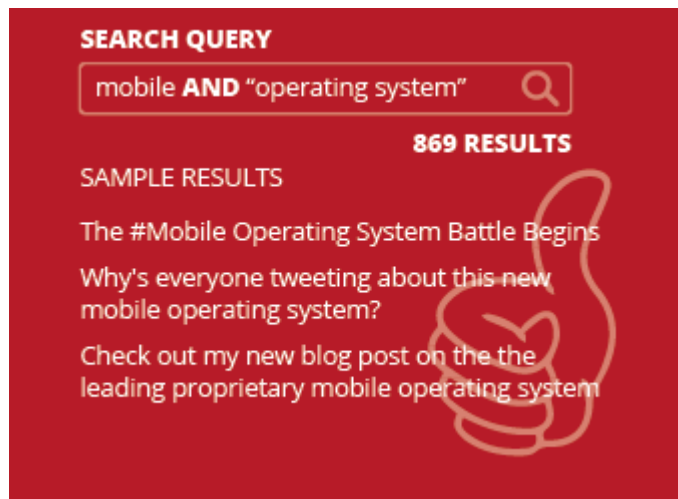


In other words, the data retrieved by your search when you use the operator AND will be the subset of all the data in the database that contains the keyword **X** as well as the keyword **Y**. Data that *only* contains **X** or *only* contains **Y** will not be returned.

Example: If you are interested in finding data related to mobile operating systems, simply searching for *mobile* will surface a lot of irrelevant findings:



However, using the operator AND to search for *mobile* AND "operating system" will ensure that the data you retrieve is what you are looking for:

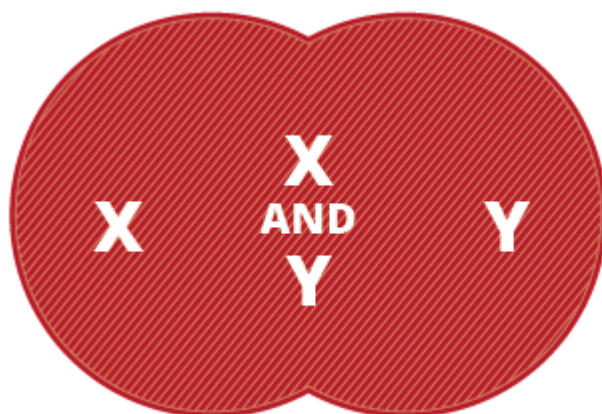


OR

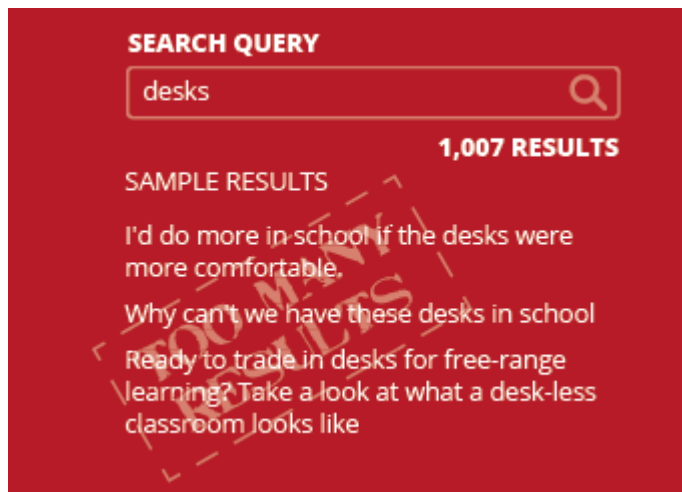
OR means that **either or both** of the keywords will be present.

X OR Y:

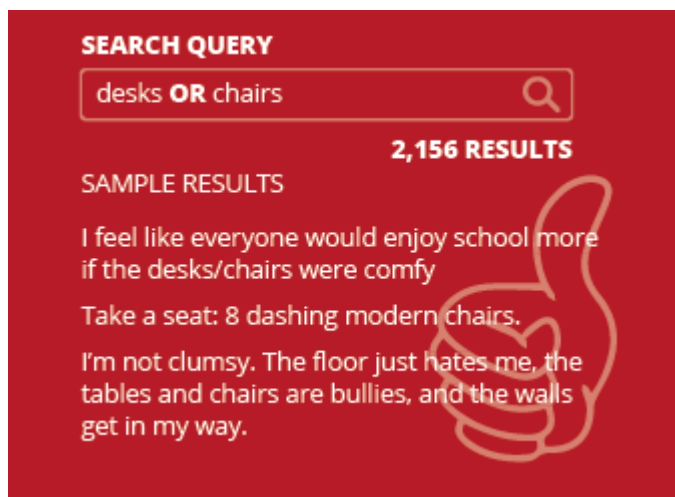
In other words, the data retrieved by your search when you use the operator OR will be the subset of all the data in the database that contains *only* the keyword **X**, plus the data that contains *only* the keyword **Y**, plus the data that contains *both* the keywords **X** and **Y**. Using the operator OR will broaden your query, and return more data than if you had used the operator AND.



Example: If you are interested in finding data related to desks and chairs, only searching for desks will surface findings related only to desks:



However, using the operator OR to search for *desks* OR *chairs* will surface findings related to both:

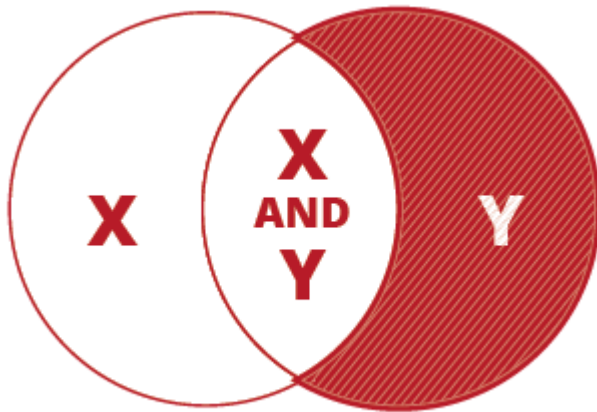


Quick Tip: Still need more results? Think of other keywords you can use to describe your topic, alternate spellings, hashtags and singular/plural forms (for example, desks OR chairs OR desk OR chair).

NOT

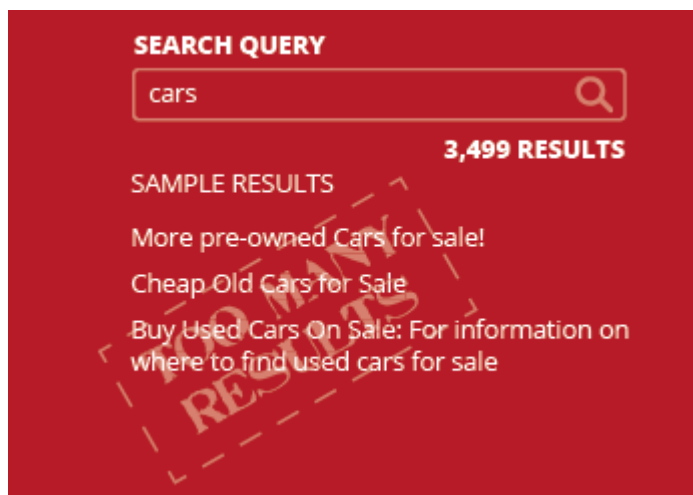
NOT means that one keyword, but not the other, will be present.

Y NOT X:

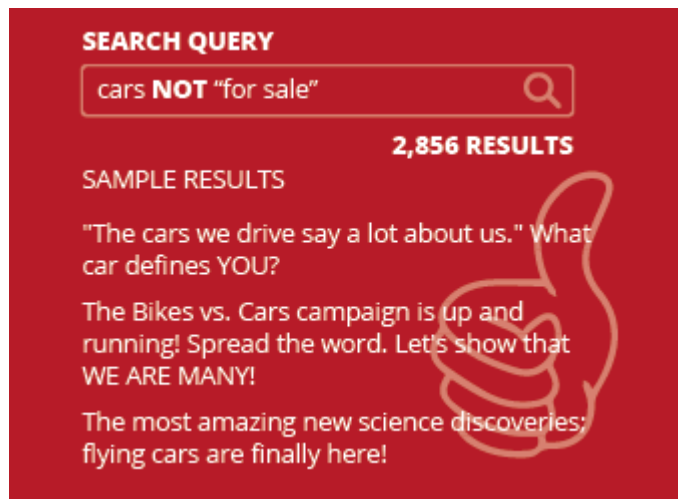


In other words, the data retrieved by your search when you use the operator NOT will be the subset of all the data in the database that contains *only* the keyword **Y** without containing the keyword **X**. The NOT operator is a good way to cut out irrelevant noise from your search results.

Example: If you are interested in finding data related to cars, but you are not interested in data relating to cars for sale, searching only for cars will surface results for both cars and cars for sale:



To cut out the noise, search for *cars* NOT "for sale":



SEARCH QUERY

cars **NOT** "for sale"

2,856 RESULTS

SAMPLE RESULTS

"The cars we drive say a lot about us." What car defines YOU?

The Bikes vs. Cars campaign is up and running! Spread the word. Let's show that WE ARE MANY!

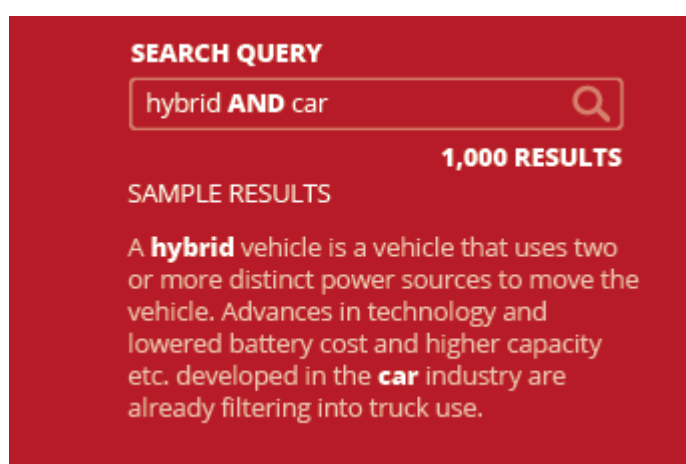
The most amazing new science discoveries: flying cars are finally here!

NEAR

NEAR means that **two keywords are close to one another in proximity**, within 5 words by default.

Note: The NEAR operator works like the AND operator with a twist. The data surfaced will not only contain both keywords, it will contain data with both keywords only when they are located close to each other in the text.

Example: If you are interested in finding data related to hybrid cars, you can search for hybrid AND car. However, this query can surface data that may still be too general for your research despite using the AND operator:



SEARCH QUERY

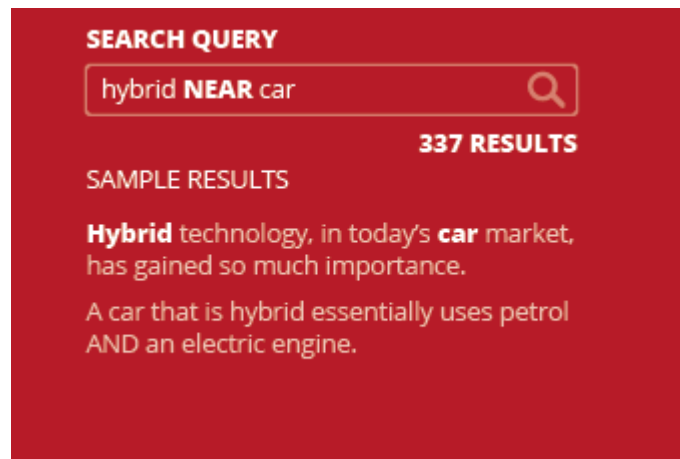
hybrid **AND** car

1,000 RESULTS

SAMPLE RESULTS

A **hybrid** vehicle is a vehicle that uses two or more distinct power sources to move the vehicle. Advances in technology and lowered battery cost and higher capacity etc. developed in the **car** industry are already filtering into truck use.

However, you can narrow your findings to ensure you only have the most relevant results by using the NEAR operator:



Quick Tip: Need to adjust the proximity of your keywords? Use a number from 0-20 in your query to specify the maximum number of words separating your keywords (for example, hybrid NEAR/3 car), if you want to see results with a maximum of 3 words between hybrid and car.

Parentheses

To make even better use of Boolean operators, you can use parentheses to nest query terms within other query terms. You can enclose search terms and their operators in parentheses to specify the order in which they are interpreted. Information within parentheses is read first, then information outside parentheses is read next.

EXAMPLES

(desks **AND** chairs) **NOT** (tables **OR** table)

(desks **OR** desk) **NOT** (chair **OR** chairs **OR** table **OR** tables)

(desks **OR** desk) **AND** (chair **OR** chairs) **NOT** (table **OR** tables)



Special Characters

Synthesio supports a limited set of special characters (#, @, &, +, -, _), which can be a part of your keyword.

Any keyword that contains one of these special characters must be enclosed within quotation marks:



"prius+"
"@bt sport"
"#dealoftheweek"

Quick Tip: If your keyword is prius, your search results will include data mentioning both prius and prius+. If you want to monitor the Prius exclusively, then your query should use the NOT operator:



prius NOT "prius+"

Other Tips

Reduce the number of keywords where possible.

The higher the number of keywords, the longer it takes the system to process. In the sample query below, the second keyword "financial crisis" is unnecessary, since any mention of the word *financial* would already be returned by the first keyword.



financial OR "financial crisis"

When writing a query, always consider ways in which people might mention the topic you're searching for.

For example, new Twitter hashtags originate and evolve constantly. Consider using them in your searches, where relevant. For example, *social media monitoring* is often written as:

- #socialmediamonitring
- #smm
- social media monitoring

A good way to write a query when you want to surface as much relevant information on *social media monitoring* would be:

("social media" OR socialmedia) NEAR/1 monitoring) OR smm

For more advanced logic, see our [Boolean Advanced Queries](#) article.

