Logical Operators

Computers search databases with a form of logic using the connectors AND, OR and NOT.

To illustrate, imagine a cookbook database which has hundreds of recipes. You want to find recipes using the ingredients macaroni and cheese. For recipes using both ingredients, use the word AND in your search. Here’s a visual representation of that search with results colored yellow:

AND

macaroni

cheese

Now suppose you wanted to use both these ingredients, but not necessarily in the same recipe. Use the connector OR to find all recipes that mention either one of those ingredients. The results looks like this:

OR

macaroni

cheese

Finally, imagine that you are lactose intolerant and can’t have cheese. You’ll search for recipes with macaroni, but without cheese by using the connector NOT.

NOT

macaroni

cheese