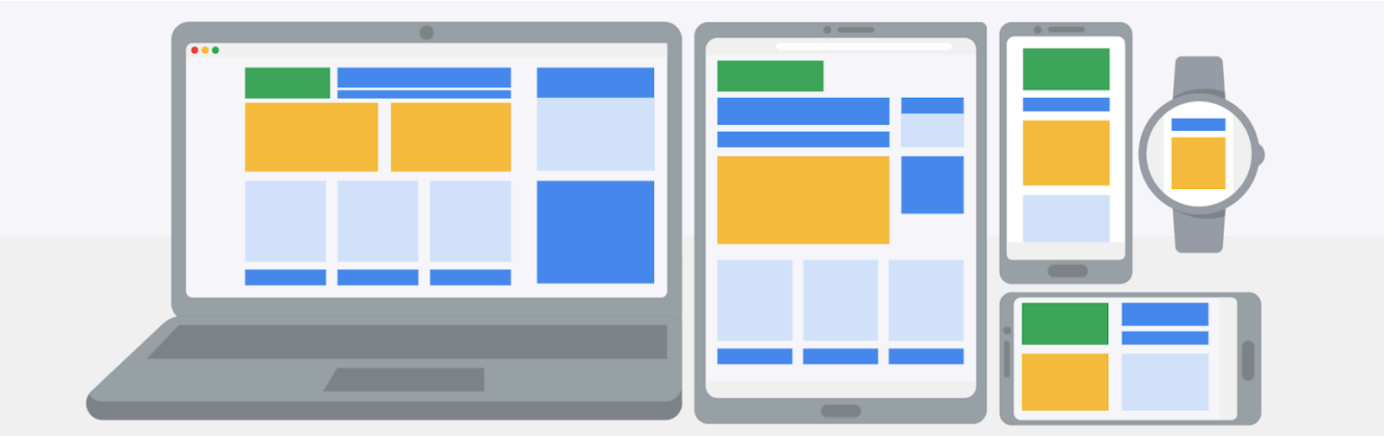
Use Boolean logic

In this reading, you will explore the basics of Boolean logic and learn how to use single and multiple conditions in a Boolean statement. These conditions are created with Boolean operators, including **AND**, **OR**, and **NOT**. These operators are similar to mathematical operators and can be used to create logical statements that filter your results. Data analysts use Boolean statements to do a wide range of data analysis tasks, such as writing queries for searches and checking for conditions when writing programming code.



Boolean logic example

Imagine you are shopping for shoes, and are considering certain preferences:

- You will buy the shoes only if they are any combination of pink and grey
- You will buy the shoes if they are entirely pink, entirely grey, or if they are pink and grey
- You will buy the shoes if they are grey, but not if they have any pink

These Venn diagrams illustrate your shoe preferences. **AND** is the center of the Venn diagram, where two conditions overlap. **OR** includes either condition. **NOT** includes only the part of the Venn diagram that doesn't contain the exception.