Operators are commonly used in just about every programming language. In the simplest terms, an operator is a character or characters that determine what action should be performed. In general, there is considered to be three group of operators and they are: logical, comparable and mathematical.

Logical operators in JavaScript refer to the && (and), || (or) and !( not) operators. What these operators do is determine the logic between two values. They are often used with other logic including comparable or mathematical operators.

Comparable operators refer to logical statements the determine equality and or difference between values. Examples of these include our variations of the == (equals) or != (not equal) and our comparisons of > (greater than), < (less than), >= (greater than or equal to), <= (less than or equal to) operators.

Mathematical operators refer to our arithmetic operators such as: + , - , \* (multiplication), / (division), % (modulo or remainder) and \*\* (exponential).

When using operators, it is important to know that in programming we sometimes refer to operators in a different way than say we use in common math. An example of this is or assignment operator the equals sign (=).

In math we say 2 + 2 = 4, However in programming this doesn’t tell us anything of importance by itself. This is because we don’t necessarily use the equal sign as equality but rather assignment to something such as a variable. If wanted to get the arithmetic of 2+2, we can write it out as 2+2 but we must assign it to a variable to store the answer of 4. One simple example would be:

let x = 2+2;

This allows us to use the arithmetic of 2+2 but also assign or store it in a variable called x in this case. If we then printed x, it would display 4.

This is just one case of how operators can be used in programming but vary from what common use cases are outside of programming.