## Spaceship Operator <=>

We can use the spaceship operator <=> to relatively compare two values. Previously, we used the basic comparators of <, >, <=, >= to compare values, so what new behavior does the spaceship operator give us access to? Well, you can think of <=> as an operation we can use to combine all of those basic comparators into one.

Before we explore the spaceship operator, let's begin with some motivation. Given two variables, a and b, what does the following expression tell you?

a < b # => false

Since the expression above evaluates to false, it can either be the case that "a is equal to b" or "a is greater than b". If we need to know exactly which one is the case, a simple check using < won't be enough since the output only tells us that "a is not less than b". However, we can use the spaceship operator to get an unambigious signal to where a and b lie on the number line relative to each other.

### How it Works

The spaceship operator <=> is used between two values and will return -1, 0, or 1. The behavior is as follows:

* given the expression a <=> b
  + it will return -1 if a is less than b
  + it will return 0 if a is equal to b
  + it will return 1 if a is greater than b

Here are a few examples of spaceship operator being used to compare numbers:

7 <=> 2 # => 1

7 <=> 7 # => 0

2 <=> 7 # => -1

10 <=> 2 # => 1

-5 <=> 10 # => -1

-3 <=> -9 # => 1