Testing String Equality

In the following lesson, you will learn how to compare strings in Scala.

We'll cover the following

- Problem
- Solution

Problem

We want to compare two strings to check whether they are equal. When strings are equal, it simply means that both strings are composed of the same characters in the same order, i.e., they are identical.

```
"Educative" = "Educative"
```

Solution

In Scala, you use the `==` method to test the equality of two objects. The result will either be true or false depending on whether the objects are equal or not.

Let's look at an example.

This code requires the following environment variables to execute:

LANG	C.UTF-8

```
val string1 = "Educative"
val string2 = "educative"

val areTheyEqual = string1==string2

// Driver Code
println(areTheyEqual)
```

In the example above, the first character of both strings is different; `string1` has

In the example above, the first character of both strings is different, `string1` has an uppercase **E** while `string2` has a lowercase **e**. This means the two strings are not equal and hence, our output is `false`.

We can also look at an example where both strings are equal, and just to make things different, let's not create a new `bool` variable, rather, we will directly compare the strings in the `println` method.

This code requires the following environment variables to execute:

LANG	C.UTF-8

```
val string1 = "Hakuna Matata"
val string2 = "Hakuna Matata"

println(string1==string2)
```

Looking at our first example, what if we didn't care about letter cases and only wanted to check if the same letters, regardless of if they are uppercase or lowercase, exist in both strings.

One way to ensure that our code is not case-sensitive is by making the characters of both strings either upper case or lower case. Scala has in-built methods that can help you do just that; `toUpperCase` and `toLowerCase`.

Let's look at them in action.

This code requires the following environment variables to execute:

LANG	C.UTF-8

```
val string1 = "Educative"
val string2 = "educative"

var areTheyEqual = string1.toUpperCase==string2.toUpperCase
println(areTheyEqual) // Driver Code

areTheyEqual = string1.toLowerCase==string2.toLowerCase
println(areTheyEqual) // Driver Code
```

In the code above, `string1.toUpperCase` converts the characters of `string1` to

upper case and `string1.toLowerCase` converts the characters of `string1` to lower

case; the same goes for `string2`. `==` now compares the new uppercase strings and the new lowercase strings and the output in both cases is `true`.

> Note how we used `var` instead of `val` to declare the variable `areTheyEqual`. This is because we needed to reassign it a new value.

In the next lesson, we will learn how to create multiline strings.