**Comparing strings**

Another way to work with strings is by comparing them. You've seen the comparison operators == and != when you compared numbers for equality. You can also use them with strings! For example, let’s compare the string "Yes" to "yes".

"Yes" == "yes"

***Returns:****false*

When you run this in the console, it returns false. Why is that? "Yes" and "yes" are the same string, right? Well not quite.

**A. Case-sensitive**

When you compare strings, case matters. While both string use the same letters (and those letters appear in the same order), the first letter in the first string is a capital Y while the first letter in the second string is a lowercase y.

'Y' != 'y'

***Returns:****true*

**B. Internal Working**

In Javascript, strings are compared character-by-character in alphabetical order. Each character has a specific ***numeric*** value, coming from [ASCII value of Printable characters](https://en.wikipedia.org/wiki/ASCII#Printable_characters). For example, the character 'A' has a value 65, and 'a' has a value 97. You can notice that a lowercase letter has a higher ASCII value than the uppercase character. If you want to know the ASCII value of a particular character, you can try running the code below:

*// Pick a string. Your string can have any number of characters.*

**var** my\_string = "a";

*// Calculate the ASCII value of the first character, i.e. the character at the position 0.*

**var** ASCII\_value = my\_string.charCodeAt(0);

*// Let us print*

console.log(ASCII\_value);

In the example above, if you wish to print ASCII values of all the characters in your string, you would have to use ***Loops*** that we will study in later part of this course. Just for reference, here is how you can use a loop to print the ASCII value of all characters in a string.

**var** my\_string = "Udacity";

*// Iterate using a Loop*

**for** (**var** i = 0; i < my\_string.length; i++) {

console.log(my\_string.charCodeAt(i));

}

The ASCII values of [A-Z] fall in the range [65-90], whereas, the ASCII values of [a-z] fall in the range [97-122]. **Therefore, when we compare strings, the comparison happens character-by-character for the ASCII values.**

**QUIZ QUESTION**

Enter each expression into the console. Check the ones that evaluate to true.

* 

"green" == "blue"

* "green" == "green"
* 

"green" == "Green"

* 

"Green" == "green"

* "green" > "blue"
* 

"green" > "green"

* "green" > "Green"
* 

"Green" > "green"

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