

Answers to the questions in the second assigment of DataProcessing
Orin Habich 10689508

What is the difference between the == operator and the === operator?

== means equal, possibly except for type

=== means equal, including type

Example: 0 == false will return true, although both sides have a different type

0 === false will return false, because both sides have a different type

What is closure?

Variables defined within a function (and with var, variables created without the keyword var are always global, even if they are created inside a function.)

Suppose f(x) is a function and var alpha = x * 2 is a local variable depending on an argument x of f(x).

Let g(y) be either a function nested in f(x), or the return value of f(x).

Then g(y) has acces to the variable alpha. Suppose we execute f(x) with another value for the argument x.

Then the local variable alpha will be different. Closure means g(y) will make use of the new variable alpha.

We could say closure makes it possible for a function to have "private" variables.

JavaScript programs use closures very often, for example the create_transform function in this weeks assignment uses it.

What are higher order functions?

Higher order functions are functions that operate on other functions, either by taking them as arguments or by returning them.

For example the create_transform function in this weeks assignment is a higher order function.

What is a query selector?

The querySelector() method returns the first element that matches a specified id in the document.

Thus it can be used to obtain elements from the DOM. This is not 'live', meaning it won't change

when you change the document.

Here is an example line of JavaScript that uses a query selector:

```
var cat = document.querySelector("img");
```