

1. Explain the difference between the == operator and the === operator

The == and === operators both test for equality of values. However, the == operator likes values to be of the same type, and therefore attempts to convert one of the value's type to that of the other. This can sometimes lead to issues, for example when comparing a value such as 0 to false, because 0 will be converted to "false" if it is converted to a Boolean. The === operator does not do type conversions, and checks whether a value is exactly equal to the other value, i.e. whether they are the same value AND type.

2. Explain what a closure is

Variables can be global or local. If you want to create a function that accesses a local variable outside of the function, you have to use "closure", which allows you to do this by returning the local variable with the function. This is better than for instance declaring a global variable outside of the function which is then changed inside the function, because this global variable can then also be changed without the function being called. Thus, closure is a way to access a local variable outside of a function, but only for that specific function.

3. Explain what higher order functions are

Higher order functions are functions that use other functions, for instance a function that returns another function, or a function that takes another function as an argument. Using higher order functions is helpful to create a level of abstraction, by not just abstracting over values but also over operations/actions.

4. Explain what a query selector is and give an example line of JavaScript that uses a query selector

A query selector lets you search a document and returns the elements in the document that matches your selector. For instance, you can search all elements that have a <p> element. This is similar to the BeautifulSoup find_all function that we used last week to find specific elements in the IMDB page.

Example:

```
let x = doc.querySelectorAll("p")
```