

Questions

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

== is a logical operator, that checks whether two values are equal. JavaScript 'silently' coerces the values to the same type.

=== is a logical operator, that checks whether two values are precisely equal. It prevents JavaScript's silent type coercion.

2. Explain what closure is. (Note that JavaScript programs use closures very often)

When a function is executed, the variables within it cease to exist. Thus when an outer function is executed and returns the inner function, the outer functions variables cease to exist.

Closure makes sure that the inner function preserves the scope chain of the enclosing function at the time the enclosing function was executed, and thus can access the enclosing function's variables.

This way, the inner function can still use the variables from the outer function, even though they ceased to exist.

3. Explain what higher order functions are.

Higher order functions are functions that operate on other functions. E.g. functions that create new functions, functions that change other functions, functions that take functions as arguments etc. ForEach is also an example of a higher order function, because it is a function that contains another function (for each element you do something).

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

Query selector(s) find and select specific elements in the html document.

Example: select element with id=demo

```
document.querySelector("#demo")
```

Difference with get element by id

document.getElementById also finds a specific element/node in the html file, but is live. A variable generated with get element by id will contain the element that fulfilled the selector when it is used (that may be different from the moment when its called).

document.querySelector is not live. A variable generated with a query selector will contain the elements that fulfilled the selector at the moment the method was called.