## Kajsa Rosenblad 11361840 Data Processing

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

The === command compares not only if the two elements on either side of the command are of equal value, but also if they are the same type. This differs from the == command which only looks at the value of the elements being compared. 5 == '5' would then evaluate to 'true', while 5 === '5' would not, since 5 is an integer and '5' is a character.

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

There's a difference between local and global variables. Local variables are defined and only accessible within a function, while a global variable can be accessed and altered at any time in the program. If we want to be able to access a local variable at all times, we can evoke a closure. This means that we return a local variable at the end of a function, which means that we simply have to call the function to access the variable. For example, if we create a list at the top of the program, then create a function with which we can add a number to the list, we will also be able to add numbers to the list without using the function. Contrarily, if we create the list inside the add function, it will become invisible as soon as we close the function. By writing a function the returns the list in it's return statement, we have created a list locally, which we can still add numbers to, by calling the function.

### Explain what higher order functions are.

A higher order function is a function that operates not only on and with values, but also with other functions. It can both take functions as arguments, and return functions as a result.

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

A query selector returns one or all element(s) that match the specified selector provided in the selector command. For example, if we are running JavaScript code in an HTML document, a query selector can be used as follows:

document.querySelectorAll("p");

This will take all paragraphs (notated in HTML by tags). If we only want to access the first paragraph with the class ="information", we can run:

document.guerySelect("p.information")