

**Question 1:** Explain the difference between the == operator and the === operator.

When you use == there will be automatic type conversions, so expressions like 0 == false and "" == false are also true. So you can only use this when you know for sure that the types are the same.

When you do not want any type conversions to happen, you can use === . This tests whether a value is precisely equal to the other, so "" === false is false as expected.

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

A closure in JavaScript is a function that references bindings from local scopes around it. Because of this you don't have to worry about lifetimes of bindings and it makes it possible to use function values in creative ways.

**Question 3:** Explain what higher order functions are.

Higher order functions are functions that operate on other functions. They can take other functions as arguments or they can return them.

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

The querySelector method takes a selector string and returns only the first matching element or null when no element matches. If you want to return all the matches, you should use the querySelectorAll() method instead.

Example:

```
<div id="example"></div>
<div id="example1"></div>
<div id="example2"></div>
```

```
<script>
    document.querySelector('example');    // returns the first div
    document.querySelector('example10'); // returns nothing
    document.querySelector('example2');   // returns the third div
</script>
```