# Javascript Questions

1. What are the advantages and disadvantages of Javascript being an interpreted language?

* Advantages:
* Javascript has extended functionality to websites using third party scripts among several other handy features. **Javascript is executed on the client side (i.e.**  code is executed on the user's processor instead of the web server thus saving bandwidth**).**
* Disadvantages:
* **Javascript rendering varies** (Different layout engines may render Javascript differently resulting in inconsistency in terms of functionality and interface).

1. What is a closure and what are its benefits and drawbacks?

* A closure is the combination of a function and the lexical environment within which that function was declared. We can use a closure anywhere that you might normally use an object with only a single method.
* They are useful because, they let you associate some with a function that operates on that data (lexical environment). This has obvious parallels to object oriented programming, where objects allow us to associate some data (the object's properties) with one or more methods.

1. What happens when a variable is declared without the var keyword and why would you want to do this?

* ‘var’ is used to create a local variable, “no var” will look up the scope chain until it finds variable or hits global scope, because global scope don’t requires var.

1. What are the differences between null and undefined?

* ‘null’ is an special object, when using typeof null returns **object (which indicates the absence of value)**.
* Whereas undefined means variable has been declared but has not yet been assigned a value.
* Example: var Test;

Alert(Test); //shows undefined because none of the value got assigned to it.

1. The following code returns false, why?

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| var object1 = { foo: 'bar' };  var object2 = { foo: 'bar' };  console.log(object1 === object2);  Answer: object1 and object2 are two distinct instances, so they both represent different objects (i.e. they occupy different locations in memory). Therefore, when we are trying to check them for equality the result is false. |

1. What is the difference between an array, an associative array and an object in Javascript?

* Arrays are for numerically indexed data.
* Whereas "**associative array**" as a data structure that stores information as a collection of key-value pairs (non-numeric keys).

1. Why should arrays be declared using the var foo = []; syntax instead of var foo = new Array();
2. Explain why x is undefined in the following code:

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| var x = 100;  function test(changeIt) {  if(changeIt) {  var x = 199;  }  console.log("X = " + x);  }  test(false);  Answer:  ‘x’ has to be initialized inside the function so that X value will display 100 in console. And also, as we are sending the value as false, if condition will not meet. |

1. What is a promise and why would you want to use one?

* Promise refers to sequencing asynchronous operation (represents the eventual result of an asynchronous operation).
* Uses:Testing promises is probably easier than we think because setTimeout can be used as our async "task".
* Promises allow handling asyn errors in a very similar way to syn code.
* Better performance and flexibility.

1. DOM usage: Assuming a page has 4 list items on it, which of these is the better way to access them? Explain why.

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| var ids = ["listItem0","listItem1","listItem2","listItem3"];  for(var i = 0; i < ids.length; i++)  {  var node = document.getElementById(ids[i]);  }  OR  var nodes = document.getElementsByTagName("li");  for(var i = 0; i < nodes.length; i++)  {  var node = nodes[i];  }  Answer:  I prefer to follow first choice because arrays are a handy way to store a set of related items of the same type where we are accessing array items by index. |