Descriptive question and answers on JavaScript

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WDPF Round 39

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1. **What is JavaScript?**

Ans: JavaScript is a client-side scripting language that can be inserted into HTML pages and is understood by web browsers. JavaScript is a lightweight, interpreted, object-based programming language.

1. **What are JavaScript Data Types?**

Ans: Following are the JavaScript Data types:

Number

String

Boolean

Function

Object

Undefined

1. **What is the use of isNaN function?**

Ans: isNan function returns true if the argument is not a number otherwise it is false.

1. **Which company developed JavaScript?**

Netscape is the software company who developed JavaScript.

1. **What are undeclared and undefined variables?**

Undeclared variables are those that do not exist in a program and are not declared. If the program tries to read the value of an undeclared variable, then a runtime error is encountered.

Undefined variables are those that are declared in the program but have not been given any value. If the program tries to read the value of an undefined variable, an undefined value is returned.

1. **What is a prompt box?**

A prompt box is a box which allows the user to enter input by providing a text box. Label and box will be provided to enter the text or number.

1. **What is ‘this’ keyword in JavaScript?**

‘This’ keyword refers to the object from where it was called.

1. **Which symbol is used for comments in Javascript?**

// for Single line comments and

/\* Multi

Line Comment

\*/

1. **What is === operator?**

=== is called as strict equality operator which returns true when the two operands are having the same value without any type conversion.

1. **What are all the looping structures in JavaScript?**

Following are looping structures in Javascript:

* 1. For
  2. While
  3. do-while loops

1. **What is called Variable typing in Javascript?**

Variable typing is used to assign a number to a variable and the same variable can be assigned to a string.

Example

i = 10;

i = "string";

This is called variable typing.

1. **Explain the difference between “==” and “===”?**

“==” checks only for equality in value whereas “===” is a stricter equality test and returns false if either the value or the type of the two variables are different.

1. **What would be the result of 3+2+”7″?**

Since 3 and 2 are integers, they will be added numerically. And since 7 is a string, its concatenation will be done. So the result would be 57

1. **What do mean by NULL in Javascript?**

The NULL value is used to represent no value or no object. It implies no object or null string, no valid boolean value, no number and no array object.

1. **What is an undefined value in JavaScript?**

Undefined value means the

* Variable used in the code doesn’t exist
* Variable is not assigned to any value
* Property doesn’t exist

1. **What are all the types of Pop up boxes available in JavaScript?**
   1. Alert
   2. Confirm and
   3. Prompt
2. **What is the difference between an alert box and a confirmation box?**

An alert box displays only one button which is the OK button.

But a Confirmation box displays two buttons namely OK and cancel.

1. **Explain the for-in loop?**

The for-in loop is used to loop through the properties of an object.

The syntax for the for-in loop is –

for (variable name in object){

statement or block to execute

}

In each repetition, one property from the object is associated to the variable name, and the loop is continued till all the properties of the object are depleted.

1. **What boolean operators can be used in JavaScript?**

The ‘And’ Operator (&&), ‘Or’ Operator (||) and the ‘Not’ Operator (!) can be used in JavaScript.

\*Operators are without the parenthesis.

1. **What are the characteristics of JavaScript?**

Ans:

* JavaScript Lives in a Web Page
* JavaScript is not server-side language. It is client-side.
* It is weakly typed because it does not need to specify datatypes to declare variable (int, float, string)
* It is an Interpreted language because browsers interpret it.
* JavaScript is case sensitive.

1. **What is the function of return statement?**

Ans: The return statement terminates the execution of a function. A return statement can also return a value to the calling function.

1. **What do you mean by local and global variable?**

Ans:

**Global variables** are declared outside of any function, and they can be accessed (used) on any function in the program.

**Local variables** are declared inside a function, and can be used only inside that function.

1. **What is the difference between while and do-while loop?**

Ans: In While loop the condition is tested first and then the statements are executed if the condition turns out to be true. In do while the statements are executed for the first time and then the conditions are tested.

1. **What is break and continue statement?**

Ans: When the **break** statement is encountered inside a loop, the loop is immediately terminated.

The **continue** statement will break the current iteration and continue the loop with the next value.

1. **What is JavaScript Event?**

Ans: A JavaScript can be executed when an event occurs, like when a user clicks on an HTML element. Adding JavaScript code to an HTML event attribute: onClick=”JavaScript”.

or

Events are actions that can be detected by JavaScript. The Event object keeps tracks of various events that occur on the page, such as the user moving the mouse or clicking on the link, and allows you to react to them inside our scripts

1. **What do you mean by Array? How will you declare an array?**

The Array object is used to store multiple values in a single variable.

var myCars=new Array("Saab","Volvo","BMW");

or

var myCars=["Saab","Volvo","BMW"];

1. **What is the difference between “==” and “===” operator**?

Ans: Strict Equality (===) operator check for both equality value and type. Equality (==) test for value equality only.

1. **What do you mean by “with” statements? Write its syntax.**

Ans: With statement is a shortcut. Instead of having to list all of the properties of an object by repeating the basic object.

With(object){statements with properties only}

1. **What do you mean by DOM? Write its properties.**

Ans:

* The DOM is a W3C (World Wide Web Consortium) standard.
* The DOM defines a standard for accessing documents:
* The DOM is a platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document.

Document Properties are Cookie, AlinkColor, BgColor, Anchors[Array]

1. **What is reserved word? Write five reserved word.**

Ans: JavaScript has a number of reserved words that we cannot use as identifiers. Reserved words have a specific meaning to the JavaScript language, as they are part of the language syntax. Using a reserved word causes a compilation error when loading script.

Here is are some examples: if, else, switch, break, continue, return, float etc.

1. **Write about ‘interpreted’ and ‘loosely typed language’ according to JavaScript?**

# Ans: JavaScript is an interpreted language (means that scripts execute without preliminary compilation). JavaScript is a loosely typed language. That means we do not have to specify the data type of a variable when we declare it, and data types are converted automatically as needed during script execute.

1. **What is function? How can you define function in JavaScript?**

Ans: A function is a block of code that executes only when we tell it to execute. It can be when an event occurs.

function *functionname*()  
{  
*some code*  
}

1. **What are the difference between alert() and prompt()?**

Ans: A prompt box is often used if we want the user to input a value before entering a page. A JavaScript alert is a simple window containing a message.

1. **What is escape character/sequence? How to use this?**

Ans: Escape sequences allow us to parse string literals in JavaScript for special characters/ formatting.

\' single quote

\" double quote

\\ backslash

\n new line

1. **Define concatenation**

Ans: String concatenation refers to binding one or more string into a single string.

Example: var x = “Hello” + “ World”;

1. **How to use ternary operator in JavaScript?**

Ans: The ternary operator will accept three operands and is used to assign a certain value to a variable based on a condition. (b == 5) ? a="true" : a="false";

1. **What is the function of floor(), ceil() and round() methods of Math object?**

Ans:

Math.ceil(): Round a number upward to it's nearest integer: Math.ceil(1.4) return 2.

Math.floor(): Round a number downward to its nearest integer: Math.floor(1.6); return 1

Math.round(): Round a number to the nearest integer:Math.round(2.5); return 3

1. **What is the difference between substring**() and substr()?

string.substr(start,length)  
string.substring(start,stop)

substr reads 'length' number of chars, starting at 'start', substring reads from 'start' to 'stop'. whatever number of chars that happens to be.

1. **What are JavaScript Data Types?**

Ans: In programming, data types is an important concept. To be able to operate on variables, it is important to know something about the type. JavaScript variables can hold many data types like Number, string, Boolean, undefined, null etc.

1. **What is the function of charAt()?**

Ans: The charAt() method returns the character at the specified index in a string. The index of the first character is 0, the second character is 1.

1. **What is the difference between setInterval() and setTimeout()**Ans: The setInterval() method will wait a specified number of milliseconds, and then execute a specified function and it will continue to execute the function, once at every given time-interval

The setTimeout() method will wait the specified number of milliseconds, and then execute the specified function.

1. **What is the function of indexOf()?**

Ans: The indexOf() method returns the position of the first occurrence of a specified value in a string.

var str="Hello world, welcome to the universe.";  
var n=str.indexOf("e"); return 1.

1. **What is the function of typeof operator in JavaScript?**

Ans: The **typeof operator** is used to get the [data type](http://www.w3resource.com/javascript/variables-literals/values.php) (returns a string) of an expression.

1. **What is history object? Write methods of it.**

Ans: The history object is to move back and forth in a site by referencing the previously visited sites. Back(), forward(), go(n)

1. **What do you mean by cookies?**

A cookie is a variable that is stored on the visitor's computer. Each time the same computer requests a page with a browser, it will send the cookie too.

document.cookie=value;[expires];[path];[domain];[secure];

1. **What do you mean by events and events handler?**

Ans: Events are actions that can be detected by JavaScript. Using JavaScript, we can respond to an event using Event Handlers. We can attach an event handler to the HTML element for which we want to respond to when a specific event occurs.

1. **What do you mean by object? Write 5 built in objects in JavaScript?**

Ans: Objects are collection of properties arranged in a hierarchy.

Window, Document, Form, Array, Object

1. **What is Regular Expression?**

Ans: A regular expression is an object that describes a pattern of characters. Regular expressions are used to perform pattern-matching and "search-and-replace" functions on text.

1. **What is the difference between undefined value and null value?**

Ans: An undefined value is returned when we attempt to use a variable that has not been define or one that is declared but we forgot to provide with a value. Null amounts to a “nothing literal” we can declare and define a variable as null.

1. **What is eval() in JavaScript?**

Ans: The eval() function evaluates or executes an argument. eval("x=10;y=20;document.write(x\*y)"); return 200

1. Write about the errors shown in JavaScript?

Ans:

JavaScript gives a message if it encounters an error. The recognized errors are -

* Load-time errors: The errors shown at the time of the page loading are counted under Load-time errors. These errors are encountered by the use of improper syntax, and thus are detected while the page is getting loaded.
* Run-time errors: This is the error that comes up while the program is running. It is caused by illegal operations, for example, division of a number by zero, or trying to access a non-existent area of the memory.
* Logic errors: It is caused by the use of syntactically correct code, which does not fulfill the required task. For example, an infinite loop.

1. What are Screen objects?

Ans:

Screen objects are used to read the information from the client's screen. The properties of screen objects are -

AvailHeight: Gives the height of client's screen

AvailWidth: Gives the width of client's screen.

ColorDepth: Gives the bit depth of images on the client's screen

Height: Gives the total height of the client's screen, including the taskbar

Width: Gives the total width of the client's screen, including the taskbar