

Descriptive questions & answers for Java Script

1. “JavaScript is called interpreted language”- why?

Answer: JavaScript is called interpreted language because JavaScript has no compilation step like other languages (C++ or Java), instead, an interpreter in the browser reads over the JavaScript code, interprets each line, and runs it.

2. Why JavaScript is considered as a “weakly typed” or “untyped” language?

Answer: JavaScript is considered as a “weakly typed” or “untyped” language because it will figure out what type of data someone has and make the necessary adjustments so that there is no need to redefine different types of data. That’s why new programmers regard JavaScript as **smart** as it saves time in learning several different conversion steps and data type declarations.

3. What do you understand by Undefined and null values?

Answer: **Undefined** value is the value that returns when someone attempts to use a variable that has not been defined or one that is declared but forgot to provide with a value. A non-existent property of an object also returns undefined if it is addressed.

For example:

```
var a;
```

```
var a = undefined;
```

```
var a = {};
```

On the other hand, a variable can be declared or defined as **null**, if there is absolutely nothing in it but someone doesn’t want it to be undefined. Null is not the same as zero (0) in JavaScript. It represents the null, empty, or non-existent reference.

Example: Let assign the value of null to b:

```
var b = null;
```

4. What are global and local variables?

Answer: Variables in JavaScript have scope, which refers to the regions of the script where the variables can be used. A **global variable**, has global scope and is defined in the entire script.

Whereas, **local variables** are local to the functions in which they are defined. As a general rule, we should avoid naming any two variables, whether global or local, with the same name or identifier.

5. What is an array?

Answer: An array is a data structure that contains a group of elements. Typically, these elements are all of the homogenous data, such as an integer or string. Arrays are commonly used in computer programs to organize data so that a related set of values can be easily sorted or searched.

6. What are the three parts of “for loop”?

Answer: The three parts of “for loop” are: initialization, condition, and increment or decrement.

Example: If we want to print 1 to 10 using for loop, the format will be like:

```
for(i=1; i<=10; i++);
```

7. What are the three main event categories?

Answer: The three main event categories are:

- Keyboard & mouse events;
- Load events;
- Form-related events.

8. What are the benefits of using “With” statement?

Answer: One can gain the following benefits by using the “With” statement:

- It doesn't need to evaluate a complex expression multiple times or assign the result to a temporary variable to refer to its members multiple times.
- It makes the code more readable by eliminating repetitive qualifying expressions.

9. What is Document Object Model (DOM)?

Answer: It is a w3c standard for accessing documents. The Document Object Model (DOM) is a cross-platform and language-independent application programming interface that defines the logical structure of documents and the way a document is accessed and manipulated. With the DOM, programmers can create and build documents, navigate their structure, and add, modify, or delete elements and content. Anything found in an HTML document can be accessed, changed, deleted, or added using the DOM.

10. What is the event and event handler?

Answer: In programming, **an event** is an action that occurs as a result of the user or another source, such as key strokes, mouse activity, action selections, timer expirations, and so forth. An HTML event can be something the browser does, or something a user does. Often, when events happen, you may want to do something. JavaScript lets you execute code when events are detected.

And **an event handler** is a software routine that is used to deal with the event, allowing a programmer to write code that will be executed when the event occurs. With Web sites, event handlers make Web content dynamic. JavaScript is a common method of scripting event handlers for Web content.

Example of Events & Event Handlers:

| Events | Event Handlers |
|--------------------------|---|
| Mouse events | onClick onMouseDown onMouseUp onMouseMove onMouseOver onMouseOut |
| Key events | onKeyDown onKeyUp onKeyPress |
| Form events | onBlur onChange onFocus onReset onSubmit |
| Page/Window/Image events | onAbort onLoad onUnload onError onResize |

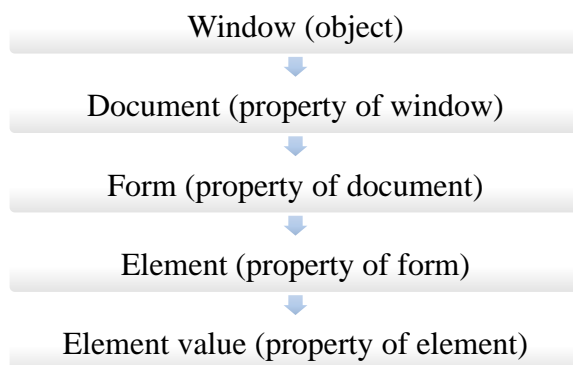
11. Reserved word? Write down five reserved words.

Answer: In JavaScript reserved word means some specific words those cannot be used as variables, labels, or function names.

Example: break, double, throw, try, public, default, class, package, int, private, native, transient, implements, delete, final, new, this etc.

12. Write down the hierarchy of objects of an html form and the object-property chain.

Answer: **The Hierarchy of Objects of an HTML Form:**



| Object-Property Chain: | |
|------------------------|--|
| Object | Properties |
| Window object | Document, Form, Element, Element value |
| Document object | Form, Element, Element value |
| Form object | Element, Element value |
| Element object | Element value |
| Element value object | Property of element |