

# Assignment - 3

## JavaScript Basic & DOM

### 1. What is JavaScript?

- JavaScript is a scripting or programming language that allows you to implement complex features on web pages.

### 2. What is the use of isNaN function?

- The isNaN() function determines whether a value is NaN when converted to a number. Because coercion inside the isNaN() function can be surprising, you may alternatively want to use Number.isNaN() .

### 3. What is negative Infinity?

- NEGATIVE\_INFINITY is a special numeric value that is returned when an arithmetic operation or mathematical function generates a negative value greater than the largest representable number in JavaScript.

### 4. Which company developed JavaScript?

- JavaScript was invented by Brendan Eich in 1995. It was developed for Netscape 2, and became the ECMA-262 standard in 1997. After Netscape handed JavaScript over to ECMA, the Mozilla foundation continued to develop JavaScript for the Firefox browser.

### 5. What are undeclared and undefined variables?

- Undeclared variables are those that have not been declared or defined in the current scope, while undefined variables are those that have been declared but not given a value.

## 6. Write the code for adding new elements dynamically?

- The createElement() method in JavaScript can be used to create new items dynamically. The setAttribute() method is used to set the attributes of the newly generated element.

## 7. What is the difference between ViewState and SessionState?

- Session state is saved on the server, ViewState is saved in the page. Session state is usually cleared after a period of inactivity from the user, The view state is posted on subsequent post back in a hidden field.

## 8. What is ===operator?

- The **strict equality** (===) operator checks whether its two operands are equal, returning a Boolean result. Unlike the equality operator, the strict equality operator always considers operands of different types to be different.

## 9. How can the style/class of an element be changed?

- by changing its class attribute. class is a reserved word in JavaScript, so in order to access the element's class, you use element.className .

## 10. How to read and write a file using JavaScript?

- Files can be read and written by using java script functions – fopen(),fread() and fwrite().

The function fopen() takes two parameters – 1. Path and 2. Mode (0 for reading and 3 for writing). The fopen() function returns -1, if the file is successfully opened.

## 11. What are all the looping structures in JavaScript?

- for - loops through a block of code a number of times
- for/in - loops through the properties of an object
- for/of - loops through the values of an iterable object
- while - loops through a block of code while a specified condition is true
- do/while - also loops through a block of code while a specified condition is true.

12. How can you convert the string of any base to an integer in JavaScript?

- To convert a string to an integer `parseInt()`, `Number()`, and `Unary operator(+)` function is used in javascript. `parseInt()` function returns `Nan`( not a number) when the string doesn't contain number. If a string with a number is sent, then only that number will be returned as the output.

13. What is the function of the delete operator?

- The delete operator removes a property from an object. If the property's value is an object and there are no more references to the object, the object held by that property is eventually released automatically.

14. What are all the types of Pop up boxes available in JavaScript?

- JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

15. What is the use of Void (0)?

- JavaScript void 0 means returning undefined (void) as a primitive value. You might come across the term “JavaScript:void(0)” while going through HTML documents. It is used to prevent any side effects caused while inserting an expression in a web page.

16. How can a page be forced to load another page in JavaScript?

- In JavaScript, we can use `window.location` object to force a page to load another page. We can use the location object to set the URL of a new page.

17. What are the disadvantages of using innerHTML in JavaScript?

- The use of innerHTML very slow: The process of using innerHTML is much slower as its contents are slowly built, also already parsed contents and elements are also re-parsed which takes time.
- Preserves event handlers attached to any DOM elements: The event handlers do not get attached to the new elements created by setting innerHTML automatically. To do so one has to keep track of the event handlers and attach it to new elements manually. This may cause a memory leak on some browsers.
- Content is replaced everywhere: Either you add, append, delete or modify contents on a webpage using innerHTML, all contents are replaced, also all the DOM nodes inside that element are reparsed and recreated.

- Appending to innerHTML is not supported: Usually, += is used for appending in JavaScript. But on appending to an Html tag using innerHTML, the whole tag is re-parsed.

