1. What is JavaScript?

A.JavaScript is a scripting language used to create and control dynamic website content, i.e. anything that moves, refreshes, or otherwise changes on your screen without requiring you to manually reload a web page. Features like: animated graphics. photo slideshows.

2. What is the use of isNaN function?

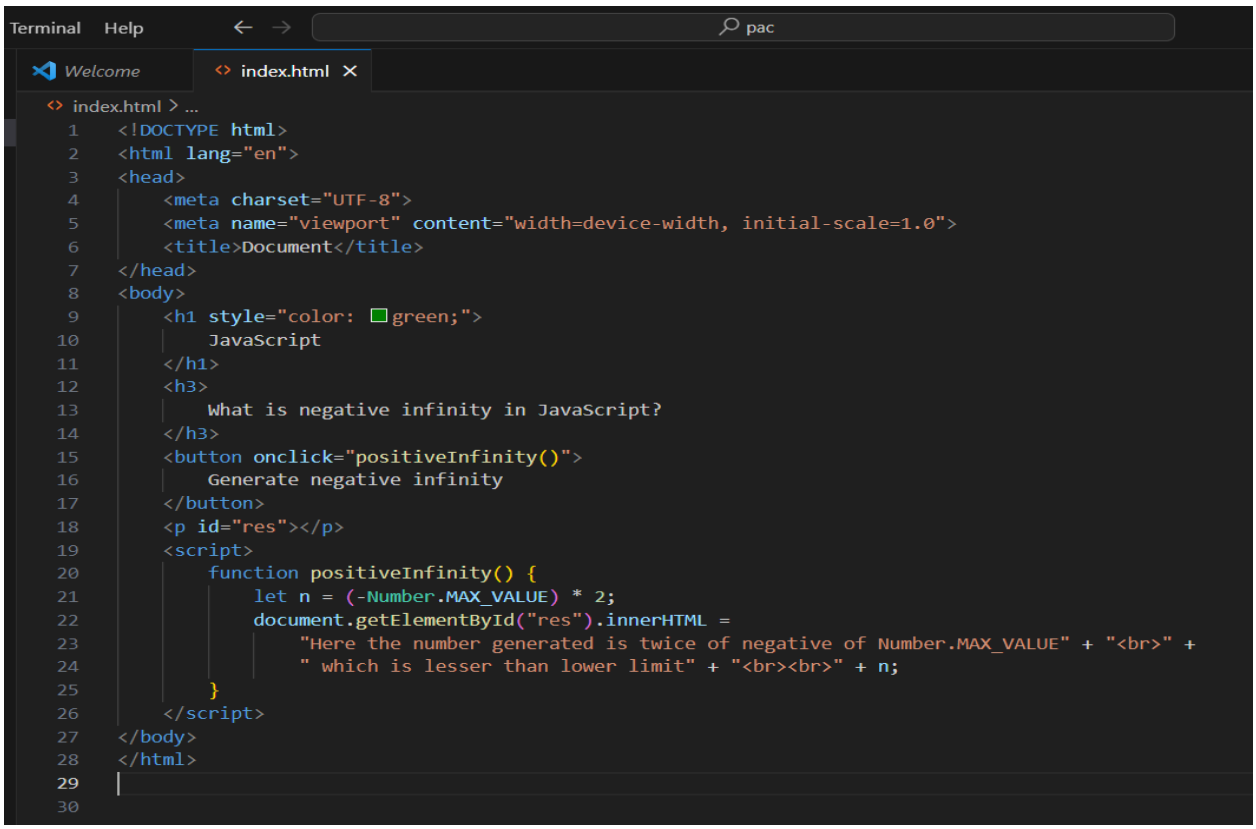
A.isNaN() returns true if a number is Not-a-Number. In other words: isNaN() converts the value to a number before testing it.

3. What is negative Infinity?

A.The negative infinity in JavaScript is a constant value that is used to represent a value That is the lowest available. This means that no other number is lesser than this value. It can be generated using a self-made function or by an arithmetic operation.

Note: JavaScript shows the NEGATIVE_INFINITY value as -Infinity.

Example:-



4. Which company developed JavaScript?

A.JavaScript was created at Netscape Communications by Brendan Eich in 1995. Netscape and Eich designed JavaScript as a scripting language for use with the company's flagship web browser, Netscape Navigator.

5. What are undeclared and undefined variables?

A.Undefined: It occurs when a variable has been declared but has not been assigned any value. Undefined is not a keyword.

Undeclared: It occurs when we try to access any variable that is not initialized or declared earlier using the var or const keyword.

6. Write the code for adding new elements dynamically?

A. document.createElement("<tagName>");
// Where <tagName> can be any HTML
// tagName like div, ul, button, etc.

// newDiv element has been created
For Eg: let newDiv = document.createElement("div");

7. What is the difference between ViewState and SessionState?

A.The basic difference between these two is that the ViewState is to manage state at the client's end, making state management easy for end-user while SessionState manages state at the server's end, making it easy to manage content from this end too. ViewState: It is maintained at only one level that is page-level.

8. What is === operator?

A.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?

A.Another way to alter the style of an element is 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.
Example :-

```
lex.html > html > body > script
<!DOCTYPE html>
<html>

<head>
    <style>
        .default {
            background-color: red;
        }

        .changedClass {
            background-color: green;
        }
    </style>
</head>

<body>


    <button class="default" onclick="changeClass()" id="myButton">
        Click Here!
    </button><br>

    <p id="myPara">
        Old class name: default
    </p>

    <script>
        function changeClass() {
            document.getElementById('myButton').className = "changedClass";
            var button_class = document.getElementById('myButton').className;
            document.getElementById('myPara').innerHTML = "New class name: "+ button_class;
        }
    </script>
</body>

</html>
```

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

A.readFile() and rs. writeFile() methods are used to read and write of a file using javascript. The file is read using the fs. readFile() function, which is an inbuilt method.

11. What are all the looping structures in JavaScript?

A.In JavaScript, there are three main types of looping structures that allow you to repeat a set of instructions multiple times. These looping structures are:

for loop: The for loop is one of the most commonly used looping structures in JavaScript. It allows you to specify an initialization, a condition, and an iteration statement.
Syntax:

javascriptCopy codefor (initialization; condition; iteration) {
    // Code to be executed in each iteration
}
Example:

javascriptCopy codefor (let i = 0; i < 5; i++) {
    console.log("Iteration: " + i);
}
while loop: The while loop repeats a block of code as long as a specified condition evaluates to true.
Syntax:

javascriptCopy codewhile (condition) {
    // Code to be executed in each iteration
}
Example:

javascriptCopy codelet i = 0;
while (i < 5) {
    console.log("Iteration: " + i);
    i++;
}
do-while loop: Similar to the while loop, the do-while loop also repeats a block of code as long as a specified condition evaluates to true. However, the do-while loop executes the code block at least once before checking the condition.
Syntax:

javascriptCopy codedo {
    // Code to be executed in each iteration
} while (condition);
Example:

javascriptCopy codelet i = 0;
do {

```
    console.log("Iteration: " + i);
    i++;
} wh
```

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

A.In JavaScript parseInt() function (or a method) is used to convert the passed-in String parameter or value to an integer value itself. This function returns an integer of the base which is specified in the second argument of the parseInt() function.

Example:-

```
function convertStoI() {
        let a = "100";
        let b = parseInt(a);
        console.log("Integer value is" + b);
        let d = parseInt("3 11 43");
        console.log('Integer value is ' + d);
  }
convertStoI();
```

13. What is the function of the delete operator?

A.The delete operator removes a given property from an object. On successful deletion,
it will return true , else false will be returned.

Example:-

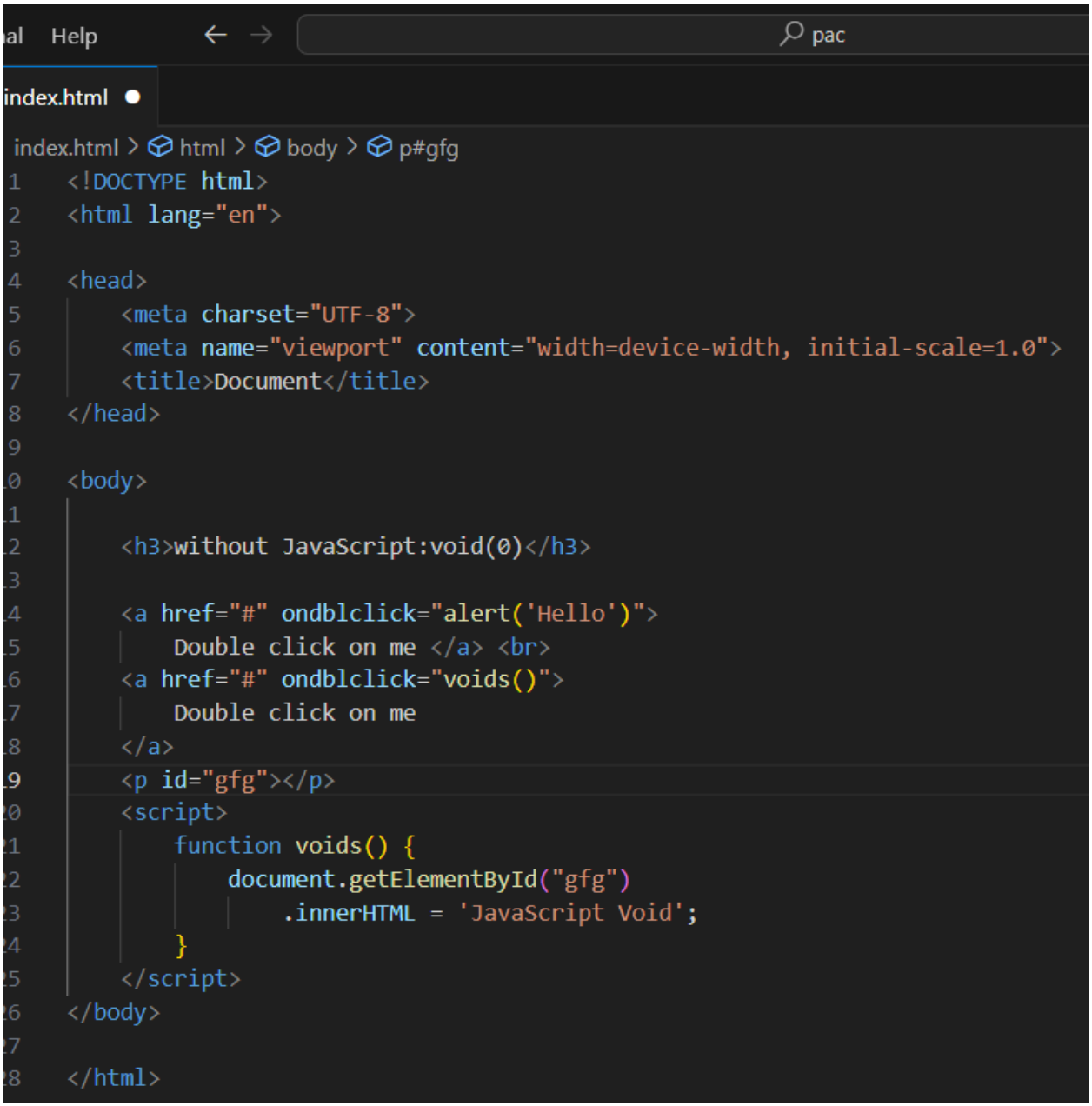
```
        var emp = {
                    firstName: "Pankaj",
                     lastName: "Kumar",
                      salary: 40000
                    }

                  console.log(delete emp.salary);
                  console.log(emp);
```

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

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

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

A.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?

A. Approach: We can use window. location property inside the script tag to forcefully load another page in Javascript. It is a reference to a Location object that is it represents the current location of the document. We can change the URL of a window by accessing it.

Example :- <script>
window.location = <Path / URL>
</script>

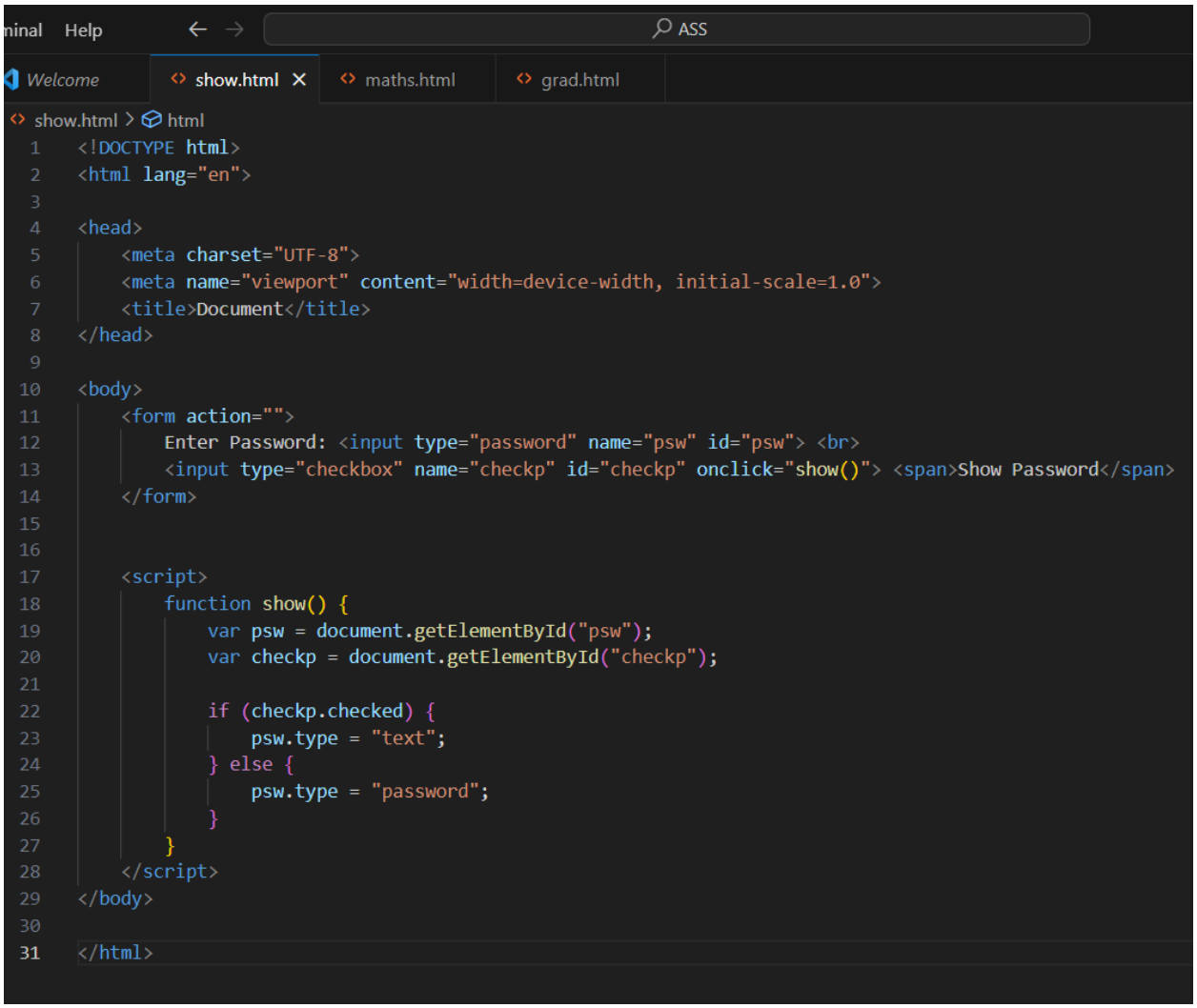
17. What are the disadvantages of using innerHTML in JavaScript?

A.

Event handlers attached to any DOM element are preserved.
Replacement is done everywhere.
It is not possible to append innerHTML.
Breaks the document.
Used for Cross-site Scripting.

18.Create password field with show hide functionalities

A.



19.Create basic math operation in JS

A.

```
<body>

    <h2>Maths Operations</h2>
    <form>
        Enter 1nd number: <input type="number" name="num1" id="op1"><br><br>
        Enter 2nd number: <input type="number" name="num2" id="op2"><br><br><br>

        <button onclick="calculate('+')" type="button">+</button>
        <button onclick="calculate('-')" type="button">-</button>
        <button onclick="calculate('*')" type="button">*</button><br>
        <button onclick="calculate('/')" type="button">/</button>
        <button onclick="calculate('%')" type="button">%</button>

        <span>Answer is:</span> <span id="total"></span>
    </form>

</body>
```

```
<script>
    function calculate(operation) {
        var num1 = parseFloat(document.getElementById("op1").value);
        var num2 = parseFloat(document.getElementById("op2").value);
        var result;

        switch (operation) {
            case '+':
                result = num1 + num2;
                break;
            case '-':
                result = num1 - num2;
                break;
            case '*':
                result = num1 * num2;
                break;
            case '/':
                result = num1 / num2;
                break;
            case '%':
                result = num1 % num2;
                break;
        }

        document.getElementById("total").innerHTML = result;
    }
```

Maths Operations

Enter 1nd number: 23

Enter 2nd number: 23

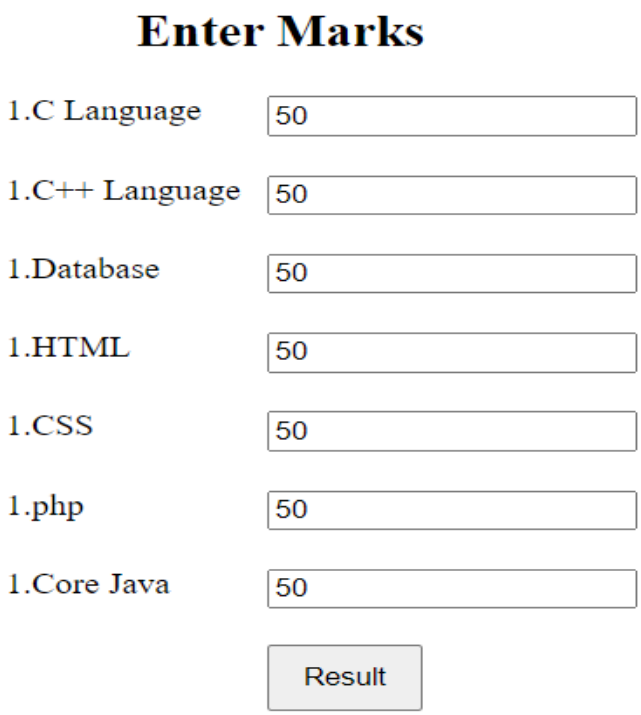
+ - *

/ %

Answer is: 46

20. Create Result

```
        1.C Language <h3><input type="number" name="marksc" id="marksc"> </h3>
        1.C++ Language <h3><input type="number" name="marksCpl" id="marksCpl"> </h3>
        1.Database <h3><input type="number" name="marksData" id="marksData"> </h3>
        1.HTML <h3><input type="number" name="marksHtml" id="marksHtml"> </h3>
        1.CSS <h3><input type="number" name="marksCss" id="marksCss"> </h3>
        1.php <h3><input type="number" name="marksPhp" id="marksPhp"> </h3>
        1.Core Java<h3><input type="number" name="marksCore" id="marksCore"> </h3>
        <h3><button onclick="res()">Result</button></h3>

        <div class="tp">
            <h4>Total is: <span id="total"></span></h4>
            <h4>Percentage is: <span id="per"></span></h4>
        </div>
    </div>
</body>

<script>
    function res() {

        var marksc = parseInt(document.getElementById('marksc').value) ;
        var marksCpl= parseInt(document.getElementById('marksCpl').value);
        var marksData = parseInt(document.getElementById('marksData').value) ;
        var marksHtml = parseInt(document.getElementById('marksHtml').value) ;
        var marksCss = parseInt(document.getElementById('marksCss').value) ;
        var marksPhp = parseInt(document.getElementById('marksPhp').value);
        var marksCore = parseInt(document.getElementById('marksCore').value) ;

        var totalMarks = marksc + marksCpl + marksData + marksHtml + marksCss + marksPhp + marksCore;
        var per = (totalMarks/700)*100;

        document.getElementById('total').innerHTML=totalMarks;
        document.getElementById('per').innerHTML=per+'%';
```



21.• Create a slider using JavaScript

Prev Next

```
<script>
    document.addEventListener("DOMContentLoaded", function () {
        var slider = document.querySelector(".slider");
        var prevButton = document.querySelector(".prev");
        var nextButton = document.querySelector(".next");

        let count = 0;

        function nextSlide() {
            count++;
            if (count >= slider.children.length) {
                count = 0;
            }
            updateSlider();
        }

        function prevSlide() {
            count--;
            if (count < 0) {
                count = slider.children.length - 1;
            }
            updateSlider();
        }

        function updateSlider() {
            const translateValue = -count * 100 + "%";
            slider.style.transform = "translateX(" + translateValue + ")";
        }

        // Set an interval to automatically move to the next slide every 3 seconds
        const intervalId = setInterval(nextSlide, 3000);

        // Attach click event handlers to prev and next buttons
        prevButton.addEventListener("click", function () {
            clearInterval(intervalId); // Clear the interval when manually navigating
            prevSlide();
        });
```