Morning Assessment

1–8: Variables, ID & Class Access

1. How do you declare a variable using let and assign it a string?

<script>

let greet = "Hello, world!";

console.log(greet);

</script>

2. How do you access an element by its id using JavaScript?

<p id="name">Hi Abhi</p>

<script>

let n = document.getElementById("name").textContent;

console.log(n);

</script>

3. How do you access elements by class name?

<div class="name">Abhi</div>

<div class="highlight">Bhumi</div>

<script>

let items = document.getElementsByClassName("name");

console.log(items.length);

</script>

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4. What’s the difference between getElementById() and querySelector()?

getElementById("id") -> it returns one element by ID.

querySelector() -> this uses CSS selector syntax and can select any element.

5. How do you change the text inside an element with a given id?

<h1 id="greeting">Hello</h1>

<script>

document.getElementById("greeting").textContent = "Hi Abhi!";

</script>

6. Write JavaScript to change the background color of an element with a specific class.

<div class="box" style="width:50px;height:50px;"></div>

<script>

*document*.querySelector(".box").style.backgroundColor = "pink";

</script>

7. How do you add a new class to an HTML element using JavaScript?

<script>

document.getElementById("myId").classList.add("newClass");

</script>

8. How can you toggle a class on an element?

<script>

document.getElementById("myId").classList.toggle("highlight");

</script>

9–16: Operators

9. What is the output of 5 == '5' and why?

It will be true.

Because 5==’5’ value is only checked by == operator, and not the type.

10. What is the difference between === and ==?

=== -> this operator checks both value and type and is mainly used in javascript

== -> this operator checks only the value whether they are equal or not

<script>

console.log(5 == '5'); -> this returns true

console.log(5 === '5'); ->this returns false

</script>

11. Use an arithmetic operator to calculate the average of three numbers.

<script>

let a = 10, b = 40, c = 60;

let average = (a + b + c) / 3;

console.log("Average:", average);

</script>

12. What is the output of 10 % 3?

console.log(10 % 3)

Output of 10%3 is 1.

%- It returns remainder

13. What will be the result of 4 + true?

console.log(4 + true)

here output is 5

True is taken as 1

14. Use a ternary operator to check if a number is positive.

<script>

let n = -10;

let result = n > 0 ? "Positive" : "Not Positive";

console.log(result);

</script>

15. What does !== mean?

!== -> it means not equal value and not equal type.

console.log(10 !== '10')

16. What will typeof null return?

typeof null returns an object.

console.log(typeof null);

17–24: Arrays

17. Create an array of three student names.

<script>

let *students* = ["abhi", "varsha", "divya"];

*console*.log(*students*);

</script>

18. How do you access the last item in an array?

<script>

let students = ["Abhi", "bhumi", "esha"];

console.log("Last student is:", students[students.length - 1]);

</script>

19. Add an item to the start of an array using JavaScript.

<script>

let students = ["Abhi", "bhumi", "esha"];

console.log("Last student is:", students.unshift("Abhi"));

</script>

20. Remove the last item from an array.

<script>

const fruits = ["Apple", "Banana", "Cherry", "Date"];

console.log("Before removing:", fruits);

fruits.pop();

console.log("After removing:", fruits);

</script>