**JavaScript Essentials And Advanced**

**Advance JavaScript**

**MODULE: 1 (Introduction and Code Quality)**

1. **Write a program to Show an alert**

* <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

Name : <input type="text" id="name">

<br><br>

<input type="submit" onclick="validate()">

<script>

name\_tag=document.getElementById("name");

console.log(name\_tag);

function validate()

{

if(name\_tag.value=="")

{

alert("name is required......!");

}

</script>

</body>

</html>

**2.** **What will be the result for these expressions?**

**1. 5 >4**

* True. This expression compares the values 5 and 4 and checks if 5 is greater than 4, which is true.

**2."apple" > "pineapple"**

* False. In JavaScript, string comparison is based on lexicographical (dictionary) order. The expression is false.

**3."2" > "12"**

* True : The character "2" is greater than "1", so the expression is true.

**4. undefined == null**

* True. The equality operator (==) in JavaScript performs type coercion. In this case, both undefined and null are considered equal when using the equality operator, so the expression is true.

**5. undefined === null**

* False. The strict equality operator (===) in JavaScript does not perform type coercion. undefined and null are of different types, so the expression is false.

**6. null == "\n0\n"**

* False. The equality operator (==) in JavaScript does type coercion. When comparing null to a string, null is only considered equal to null or undefined. Therefore, the expression is false.

**7. null === +"\n0\n"**

* False. The strict equality operator (===) in JavaScript does not perform type coercion. The expression compares a number (7) with the result of converting the string "\n0\n" to a number using the unary plus operator. Since null and 7 are of different types, the expression is false.

**3.Will alert be shown?**

**if ("0")**

**{ alert( 'Hello'); }**

* This equation does not compare in if

Ex:

if(name.value==”0”)

{alert(‘hello’)}

**4.What is the code below going to output?**

**alert( null || 2 || undefined );**

* output:2

**5. The following function returns true if the parameter age is greater than**

**18. Otherwise it asks for a confirmation and returns its result:**

**function**

**checkAge(age)**

**{**

**if (age> 18) { return true; }**

**else {**

**// ...return confirm (‘did parents allow you?');**

**}**

**}**

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<body>

<script>

function checkAge(age) {

if (age > 18) {

return true;

}

else {

return confirm('Did parents allow you?');

}

}

</script>

</body>

</html>

But answer is false.

**6.Replace Function Expressions with arrow functions in the code below:**

**Function**

**ask(question, yes, no)**

**{ if (confirm(question))yes();**

**else**

**no();**

**}**

**ask("Do you agree?", function()**

**{ alert("You agreed."); },**

**function() {**

**alert("You canceled the execution."); }**

**}**

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</head>

<body>

<script>

const ask = (question, yes, no) => {

if (confirm(question)) {

yes();

} else {

no();

}

};

ask(

"Do you agree?",

() => {

alert("You agreed.");

},

() => {

alert("You canceled the execution.");

}

);

</script>

</body>

</html>

**MODULE: 2 (Data Types and Objects)**