**Lab Tasks**

**Batch-2**

**1-What is this code going to show?**

|  |
| --- |
| var fruits = ["Apples", "Pear", "Orange"];  // push a new value into the "copy"  var shoppingCart = fruits;  shoppingCart.push("Banana");  // what's in fruits?  alert( fruits.length ); // ? |

**Answer:**

|  |
| --- |
| let matrix = [  [1, 2, 3],  [4, 5, 6],  [7, 8, 9]  ];  alert( matrix[1][1] ); // ? |

**Answer:**

**Splice**

arr.splice(index[, deleteCount, elem1, ..., elemN])

|  |
| --- |
| let arr = ["I", "study", "JavaScript", "right", "now"];  // remove 3 first elements and replace them with another  arr.splice(0, 3, "Let's", "dance");  alert( arr ) // ? |

**Answer:**

|  |
| --- |
| let arr = ["I", "study", "JavaScript", "right", "now"];  // remove 2 first elements  let removed = arr.splice(0, 2);  alert( removed ); // ? |

**Answer:**

|  |
| --- |
| let arr = ["I", "study", "JavaScript"];  // from index 2  // delete 0  // then insert "complex" and "language"  arr.splice(2, 0, "complex", "language");  alert( arr ); // |

**Answer:**

**slice**

The method arr.slice is much simpler than similar-looking arr.splice.

The syntax is: arr.slice(start, end)

|  |
| --- |
| let str = "test";  let arr = ["t", "e", "s", "t"];  alert( str.slice(1, 3) ); // ?  alert( arr.slice(1, 3) ); // ?  alert( str.slice(-2) ); // ?  alert( arr.slice(-2) ); // ? |

**Answer:**

**2-Array operations**

Try 5 array operations.

1. Create an array styles with items “Jazz” and “Blues”.
2. Append “Rock-n-Roll” to the end.
3. Replace the value in the middle by “Classics”. Your code for finding the middle value should work for any arrays with odd length.
4. Strip off the first value of the array and show it.
5. Prepend Rap and Reggae to the array.

The array in the process:

|  |
| --- |
| Jazz, Blues  Jazz, Bues, Rock-n-Roll  Jazz, Classics, Rock-n-Roll  Classics, Rock-n-Roll  Rap, Reggae, Classics, Rock-n-Roll |

**Answer:**

**3- Calling in an array context**

What is the result? Why?

|  |
| --- |
| let arr = ["a", "b"];  arr.push(function() {  alert( this );  })  arr[2](); // ? |

**Answer:m,lmlml**

**4-Sum input numbers**

Write the function sumInput() that:

Asks the user for values using prompt and stores the values in the array.

Finishes asking when the user enters a non-numeric value, an empty string, or presses “Cancel”.

Calculates and returns the sum of array items.

P.S. A zero 0 is a valid number, please don’t stop the input on zero.

**Answer:**

**5- Show the sign**

Using if..else, write the code which gets a number via prompt and then shows in alert:

1, if the value is greater than zero,

-1, if less than zero,

0, if equals zero.

In this task we assume that the input is always a number.

**Answer:**

**6- Check the login**

Write the code which asks for a login with prompt.

If the visitor enters "Admin", then prompt for a password, if the input is an empty line or Esc – show “Canceled.”, if it’s another string – then show “I don’t know you”.

The password is checked as follows:

If it equals “TheMaster”, then show “Welcome!”,

Another string – show “Wrong password”,

For an empty string or cancelled input, show “Canceled.”

The schema:

Please use nested if blocks. Mind the overall readability of the code.

Hint: passing an empty input to a prompt returns an empty string ''. Pressing ESC during a prompt returns null.

**6-Comparisons**

What will be the result for these expressions?

|  |
| --- |
| 5 > 4  "apple" > "pineapple"  "2" > "12"  undefined == null  undefined === null  null == "\n0\n"  null === +"\n0\n" |

**Answer:**