

String

1. Write a Function that accepts a string from user through prompt and count the number of 'e' characters in it.

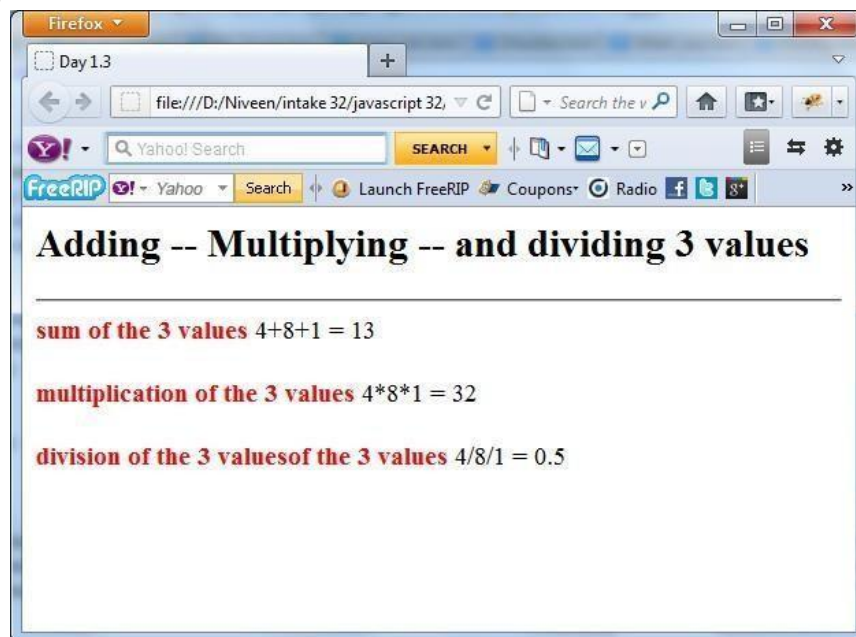
2. Write a Function to determine whether the entered string is alindrome or not. Request the string to be entered via prompt, ask the user whether to consider case sensitivity of the entered string or not via confirm, handle both cases in your script.

i.e. RADAR NOON MOOM are palindrome.

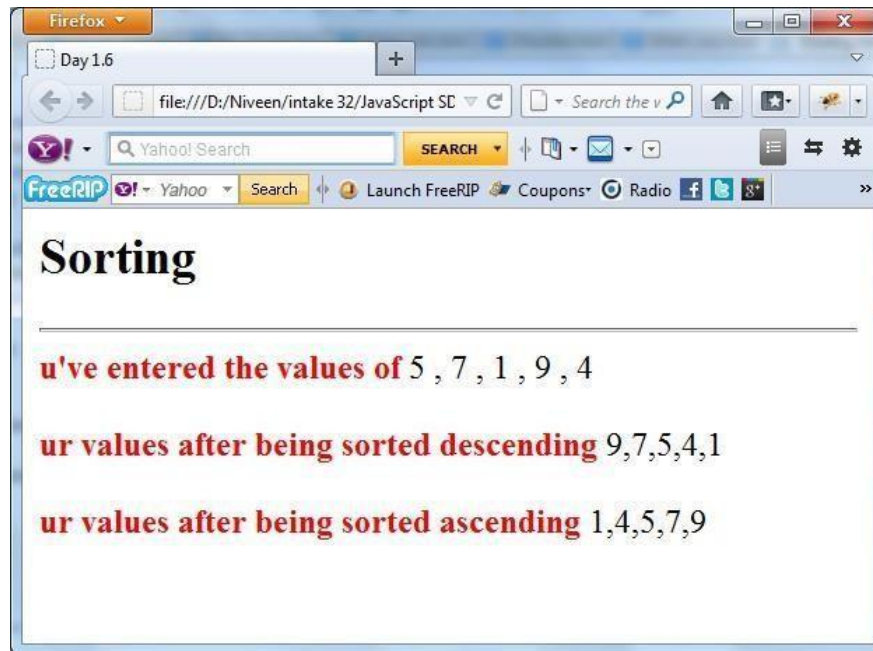
Note: raDaR is not a palindrome if user requested considering case of entered string, it will be palindrome if user requested ignoring case sensitivity.

Array Object

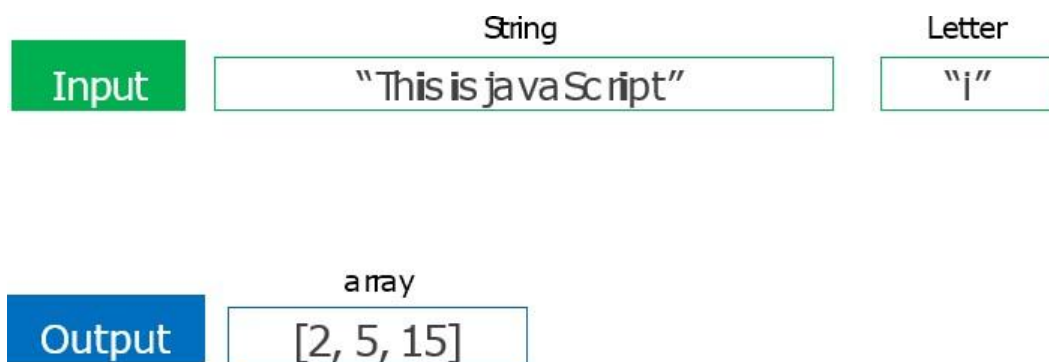
1. Fill an array of 3 elements from the user, and apply each of the following mathematical operations on it (+, *, /). Format the output as shown in Fig.



2. Fill an array (5 numerical values) from the user, Sort it in descending and ascending orders then display the output as shown in Fig.



3. Write a function that take a sentence and a letter to search for it in the given sentence and return its



Callback Function

1. Write a function `applyOperation` that takes two numbers and a function as parameters. `applyOperation` should call the passed in function with the two numbers and return the result. Test it by passing different operations like addition and multiplication.

```
console.log(applyOperation(5, 3, add));           // Expected output: 8 (5 + 3)
console.log(applyOperation(5, 3, multiply));      // Expected output: 15 (5 * 3)
console.log(applyOperation(10, 2, (a, b) => a - b)); // Expected output: 8 (10 - 2)
console.log(applyOperation(10, 2, (a, b) => a / b)); // Expected output: 5 (10 / 2)
```

2. Create a function named `processArray` that takes an array and a callback function. The function should apply the callback to each element in the array and log the results. Test it by passing an array of numbers and a callback that squares each number

```
var numbers = [1, 2, 3, 4, 5];
```

Function Call : `processArray(numbers, square);`

Expected output: 1, 4, 9, 16, 25