#### Unit-2: Exercises:

### Arrays:

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Lab Experiment 2:
                             Objectives to check : iterating array using for, if
Write a JavaScript program to find the most frequent item of an array.
Lab Experiment 3:
                              Objectives to check : Arrays.forEach(), includes(),
                              push()
Write a JavaScript program to remove duplicate items from an array
                             Objectives to check : Math.floor(), while loop, if, ===
Lab Experiment 4:
Write a JavaScript program to perform a binary search.
Lab Experiment 7:
                            Objectives to check : for, if
Write a JavaScript program to sort a list of elements using Quick sort.
Lab Experiment 8:
                              Objectives to check : for, if
Write a JavaScript program to implement Bubble Sort.
Exercise
                              Objectives to check : while loop, length property,
                              push(), splice()
Write a JavaScript function to move an array element from one position to another.
Input 1:
10 20 30 40 50
0 2
Output 1:
[20, 30, 10, 40, 50]
Input 2:
10 20 30 40 50
-1 -2
Output 2:
[10, 20, 30, 40, 50]
Exercise
                            Objectives to check: map()
Write a Javascript code to perform squares on each element in array and print the
result in array format.
Input : 1 2 3 4 5
Output : [1, 4, 9, 16, 25]
Exercise
                             Objectives to check: reduce()
Write a Javascript code to get product of each element in array and print the result
Input: 1 2 3 4 5
Output: 120
```

# Strings:

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Lab Experiment 1:
                              Objectives to Check : string property length, string
                              methods like charAt(),toUpperCase(), toLowerCase()
Write a JavaScript program which accepts a string as input and swap the case of each
For example if you input 'The Quick Brown Fox' the output should be 'tHE qUICK bROWN
                            Number.parseInt()and slice()
Exercise
Given a numbers in string, print it from left to right 'n'
                                                           number of times
Note: If the given input is NaN or given value is <=0, print -1
Ex 1: 459
//Output
4444
55555
99999999
Ex 2: -10
Output: -1
Ex 3: four
Output: -1
```

# Regular Expressions:

- Display 5 letter word & last letter should be vowel?
   Display words that begins with T and ends with vowels?
- 3. Find the length of words whose size should be 4?
- 4. Display all words which contains First letter is Capital?
- 5. Select below example & Use look behind then print words containing (the) use ignore case?
- 6. Mobile Number starts with 8 or 9 & total digit should be 10
- 7. First Character Uppercase contains lower case alphabets only 1 digit allowed in between
- 8. Email id
- 9. Password contains Min length 7 & max length is 15 contains at least special symbol, upper & lower case?
- 10. Starts & ends with vowel

# Sets and Maps:

Exercise	Objectives to Check : Set() and operator
Write a function that takes a	an array as input and returns a new array
containing only the unique elements using a Set.	
Exercise	Objectives to Check : Set() and has(), converting array
	to Set
Write a function that checks if a given element is present in a set. Return	
true if the element exists, otherwise return false.	
Exercise	Objectives to Check : Set() and forof
Given a set of strings, write	e a function that iterates through the set and logs
each string to the console.	