**SKILL SAFARI**

Week-1 ( Arrays and object)

**1.**Write a JavaScript function that merges two arrays and removes all duplicate elements.

Test data :

var array1 = [1, 2, 3];

var array2 = [2, 30, 1];

console.log(merge\_array(array1, array2));

[3, 2, 30, 1]

**2.**Write a JavaScript function to generate an array between two integers of 1 step length.

Test Data :

console.log(rangeBetwee(4, 7));

[4, 5, 6, 7]

console.log(rangeBetwee(-4, 7));

[-4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7]

**3.**Write a JavaScript program to check if an array is a factor chain or not.A factor chain is an array in which the previous element is a factor of the next consecutive element. The following is a factor chain:

[2, 4, 8, 16, 32]

// 2 is a factor of 4

// 4 is a factor of 8

// 8 is a factor of 16

// 16 is a factor of 32

Test Data :

([2, 4, 8, 16, 32]) -> true

([2, 4, 16, 32, 64]) -> true

([2, 4, 16, 32, 68]) -> false

Expected Output:

Original array:

Check the said array is a factor chain or not?

true

Original array:

Check the said array is a factor chain or not?

true

Original array:

Check the said array is a factor chain or not?

false

**4.**Write a JavaScript program to find all the unique values in a set of numbers.

Test Data :

[1, 2, 2, 3, 4, 4, 5]

[1, 2, 3, 4, 5]

[1, -2, -2, 3, 4, -5, -6, -5]

Expected Output:

[1,2,3,4,5]

[1,2,3,4,5]

[1,-2,3,4,-5,-6]

**5.**Write a JavaScript program to sort the items of an array.

Sample array : var arr1 = [ -3, 8, 7, 6, 5, -4, 3, 2, 1 ];

Sample Output : -4,-3,1,2,3,5,6,7,8

**6**. Write a JavaScript program that returns a subset of a string.

Sample Data: dog

Expected Output: ["d", "do", "dog", "o", "og", "g"]

**7.**Write a JavaScript program to get the length of a JavaScript object.

Sample object :

var student = {

name : "David Rayy",

sclass : "VI",

rollno : 12 };

**8.** Write a bubble sort algorithm in JavaScript.

Note : Bubble sort is a simple sorting algorithm that works by repeatedly stepping through the list to be sorted,

Sample Data: [6,4,0, 3,-2,1]

Expected Output : [-2, 0, 1, 3, 4, 6]

**9**. Write a JavaScript program to create a clock.

Note: The output will come every second.

Expected Console Output :

"14:37:42"

"14:37:43"

"14:37:44"

"14:37:45"

"14:37:46"

"14:37:47"

**10.** Write a JavaScript function to print all the methods in a JavaScript object.

Test Data :

console.log(all\_properties(Array));

["length", "name", "arguments", "caller", "prototype", "isArray", "observe", "unobserve"]