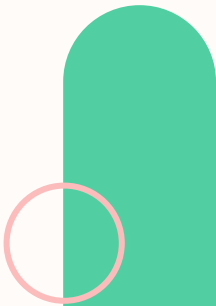


Full Stack Web Development

Exercise

Exercise

1. Write a function to get the lowest, highest and average value in the array (with and without sort function).
 - a. Example : `arr = [12, 5, 23, 18, 4, 45, 32]` → `{lowest : 4, highest: 45, average: 19.8xxx}`
2. Write a function that takes an array of words and returns a string by concatenating the words in the array, separated by commas and - the last word - by an 'and'.
 - a. Example : `arr = ["apple", "banana", "cherry", "date"]` → `"apple,banana,cherry, and date"`
3. Write a function to split a string and convert it into an array of words
 - a. Example : `"Hello World"` → `["Hello", "World"]`
4. Write a function to calculate each element in the same position from two arrays of integer. Assume both arrays are of the same length.
 - a. Example : `[1, 2, 3] + [3, 2, 1] → [4, 4, 4]`
5. Write a function that adds an element to the end of an array. However, the element should only be added if it is not already in the array.
 - a. Example : `arr = [1, 2, 3, 4]`, `newElement = 4` → `[1, 2, 3, 4]`
 - b. Example : `arr = [1, 2, 3, 4]`, `newElement = 7` → `[1, 2, 3, 4, 7]`



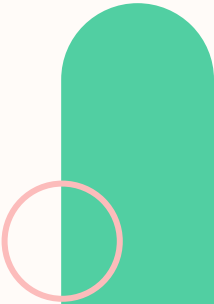
Exercise

1. Write a function to remove all odd numbers in an array and return a new array that contains even numbers only
 - a. Example : numbers = [1, 2, 3, 4, 5, 6] → [2, 4, 6]
2. Write a function to insert multiple given integer (not an array) to an array and have a maximum size input. The array can only have a maximum size from a given input. (if the maximum size of the given input is 5 than the array can only contain 5 elements).
 - a. Example :

maxSize = 5, given integers is 5, 10, 24, 3, 6, 7, 8

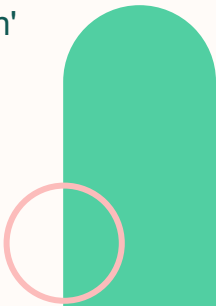
The function will return [5, 10, 24, 3, 6]

3. Write a function that will combine 2 given array into one array
 - a. Example : arr1 = [1, 2, 3], arr2 = [4, 5, 6] → [1, 2, 3, 4, 5, 6]
4. Write a function to find duplicate values in an array
 - a. Example : arr = [1, 2, 2, 2, 3, 3, 4, 5, 5] → [2, 3, 5]
5. Write a function to find the difference in 2 given array
 - a. Example : arr1 = [1, 2, 3, 4, 5], arr2 = [3, 4, 5, 6, 7] → [1, 2, 6, 7]



Exercise

1. Based on the array below write a function that will return primitive data types only. let
arr = [1, [], undefined, {}, "string", {}, []];
 - a. The function will return [1, undefined, "string"]
2. Write a function from a given array of numbers and return the second smallest number
 - a. Example : numbers = [5, 3, 1, 7, 2, 6] → 2
3. Write a function from a given array of mixed data types and return the sum of all the number
 - a. Example : mixedArray = ["3", 1, "string", null, false, undefined, 2] → 3
4. Write a function from the below array of number that will return sum of duplicate values. let
arr = [10, 20, 40, 10, 50, 30, 10, 60, 10];
 - a. The function will return 40
5. Write a game of rock, paper, scissor function that will return 'Win' or 'Lose'. The function will randomly pick between rock, paper, or scissor.
 - a. Example: if you throw a rock as an argument and the function pick a scissor then it will return 'Win'



Thank You!

