

Full Stack AI Software Development

Exercise

Job Connector Program

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 from a given array of numbers and return the second smallest number
 - a. Example : numbers = [5, 3, 1, 7, 2, 6] → 2
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 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`
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.
 - a. let arr = [1, [], undefined, {}, "string", {}, []];
 - b. The function will return [1, undefined, "string"]
2. Write a function from the below array of number that will return sum of duplicate values.
 - a. let arr = [10, 20, 40, 10, 50, 30, 10, 60, 10];
 - b. The function will return 40
3. 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

