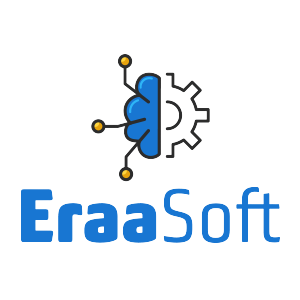
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***ARRAY SHEET***

1. **A program that calculates the average of the numbers in an array of n elements. The array is filled with random numbers.**
2. **A program in which an array contains 10 numbers and another array 2D of size 2x5. What is required is that the second array is dictated by the first array**.
3. **A program in which an array of a group of numbers and print the largest and smallest number**

**INPUT:**

$array = [ 1,10,5,2,11]

**OUTPUT:**

Largest number is: 11

Smallest number is: 1

1. **The program, in which an array contains 10 numbers, and you store a number and calculates how many numbers are greater than or equal and how many numbers are smaller than this number inside**.

**INPUT:**

$array = [ 1,10,5,2,11]

$x = 3

**OUTPUT:**

Numbers Smaller than (3) = 2

Numbers Greater then (3) = 3

1. **Create a function that takes an array of names and returns an array where only the first letter of each name is capitalized.**

**INPUT:**

Array\_of\_names(["eraasoft", "backend", "group313"])

**OUTPUT:**

["EraaSoft", "Backend", "Group313"]

1. **Given an integer array nums, move all 0's to the end of it while maintaining the relative order of the non-zero elements. Note that you must do this in-place without making a copy of the array.**

**INPUT:**

nums = [0,1,0,3,12]

**OUTPUT:**

nums = [1,3,12,0,0]

1. **Write a function that searches an array of names (unsorted) for the name "Bob" and returns the location in the array. If Bob is not in the array, return -1.**

**INPUT:**

$names = ["Alice", "Bob", "Charlie", "Dave"]

$names = ["Alice", "Charlie", "Dave"]

**OUTPUT:**

1

-1

1. **Create a function that takes a array of numbers and returns the second largest number.**

**INPUT:**

$numbers = [11, 55, 2, 3, 4, 5, 6, 7, 8, 9, 10]

**OUTPUT:**

11

1. **A program containing an array of different numbers and store a number $x If the number is not in the array prints not found and if it exists prints found and prints this number characteristics like**

* **Positive or Negative**
* **How many digits are in this number**
* **Is-Prime or not.**
* **odd or even**
* **read from the right as the left or not such as "505"**

**INPUT:**

$numbers = [11, 55, 24, 43, 44, 545, 6, 777, 810, 94, 140] $ x = 545

$numbers = [11, 55, 24, 43, 44, 545, 6, 777, 810, 94, 140] $ x = 1000

**OUTPUT:**

Found, Positive, not prime, odd , Yes 🡺 read from the right as the left