

# Implementing Sorting Array Function

## **Expected performance**

This function is designed to sort an array containing unique elements (from 0 to 9). The length of this array can be varied from 2 to 10.

## **Input**

An array A contains unique n-elements, whose values are integers. The length (n) of A is range from 2 to 10.

## **Output**

Sorted array B in ascending order. The length of array B must be the same to A.

## **Examples**

- Test case 1: A = [3,0] → B = [0,3]
- Test case 2: A = [1,3,2] → B = [1,2,3]
- Test case 3: A = [5,9,1,3,7] → B = [1,3,5,7,9]
- Test case 4: A = [9,8,7,6,5,4,3,2,1] → B = [1,2,3,4,5,6,7,8,9]
- Test case 5: ...

## **Notes**

- Candidate should use OOP concept to provide the proposed approach(es) for implementing this function. The designed class should contains a function to provide inputs to the system and a function to display or return sorted array
- The implementation of this function should be done by using Machine Learning-based techniques (Decision Trees, Neural Networks, Recurrent Neural Networks, Generative Adversarial Networks, Graph Neural Networks ...) or any other creative techniques reflecting your problem solving and data analysis skills. Candidate should provide some explanations on your proposed approach(es)
- Unit testing method is also encouraged
- The problem is not difficult, and candidate will be assessed based on the understanding about Machine Learning techniques.