

1. Write a Python Program to find sum of Array ?

```
In [1]: def sumOfArray():  
        in_arr = eval(input("Enter the Array: "))  
        print(f'The sum of {in_arr} is {sum(in_arr)}')  
  
sumOfArray()
```

Enter the Array: 1,2,3,4,5  
The sum of (1, 2, 3, 4, 5) is 15

2. Write a Python Program to find Largest element in an Array ?

```
In [2]: def largestElement():  
        in_arr = eval(input("Enter the Array: "))  
        print(f"The Largest Element in {in_arr} is {sorted(in_arr, reverse=True)[0]}")  
  
largestElement()
```

Enter the Array: 1,2,3,4,5  
The Largest Element in (1, 2, 3, 4, 5) is 5

3. Write a Python Program for array rotation ?

```
In [3]: def reverseOfArray():  
        in_arr = eval(input("Enter the Array: "))  
        print(f"The Reverse of Array {in_arr} is {in_arr[::-1]}")  
  
reverseOfArray()
```

Enter the Array: 1,2,4,5,6  
The Reverse of Array (1, 2, 4, 5, 6) is (6, 5, 4, 2, 1)

4. Write a Python Program to Split the array and add the first part to the end ?

```
In [4]: def sumOfSplits():  
        in_arr = eval(input("Enter the Array: "))  
        print(f"The Sum of First and Last Elements of Array {in_arr} is {in_arr[0]+in_arr[-1]}")  
  
sumOfSplits()
```

Enter the Array: 2,4,6,7,9  
The Sum of First and Last Elements of Array (2, 4, 6, 7, 9) is 11

5. Write a Python Program to check if given array is Monotonic ?

```
In [5]: def checkMonotonic():  
        in_arr = eval(input("Enter the Array: "))  
        if(all(in_arr[i]<=in_arr[i+1] for i in range(len(in_arr)-1)) or all(in_arr[i]>=in_arr[i+1] for i in range(len(in_arr)-1))):  
            print(f'Array {in_arr} is Monotonic')  
        else:  
            print(f'Array {in_arr} is Not Monotonic')  
  
        checkMonotonic()  
        checkMonotonic()
```

Enter the Array: 2,4,7,9,23

Array (2, 4, 7, 9, 23) is Monotonic

Enter the Array: 7,3,78,5

Array (7, 3, 78, 5) is Not Monotonic

In [ ]: