**Assignment 7 Solutions**

Submitted By : Bhupendra Singh

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

**def** sumOfArray():

in\_arr **=** eval(input("Enter the Array: "))

print(f'The sum of {in\_arr} is {sum(in\_arr)}')

sumOfArray()

Enter the Array: 1,2,3,4,7

The sum of (1, 2, 3, 4, 7) is 17

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

**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: 12,100,9,8

The Largest Element in (12, 100, 9, 8) is 100

**3. Write a Python Program for array rotation ?**

**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: 1,2,3,4,5

The Reverse of Array (1, 2, 3, 4, 5) is (5, 4, 3, 2, 1)

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

**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: 12,2,3,4,5

The Sum of First and Last Elements of Array (12, 2, 3, 4, 5) is 17

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

**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: 1,2,3,4,5,6,

Array (1, 2, 3, 4, 5, 6) is Monotonic