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

Ans.

def sumOfArray():

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

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

sumOfArray()

OUTPUT:

Enter the Array: [2,4,6,8,10]

The sum of [2, 4, 6, 8, 10] is 30

1. Write a Python Program to find largest element in an array?

Ans.

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()

OUTPUT:

Enter the Array: [2,4,6,8,10]

The Largest Element in [2, 4, 6, 8, 10] is 10

1. Write a Python Program for array rotation?

Ans.

def rotateArray(a, d):

temp = []

n = len(a)

for i in range(d, n):

temp.append(a[i])

i = 0

for i in range(0, d):

temp.append(a[i])

a = temp.copy()

return a

arr = [2, 4, 6, 8, 10]

print("Array after left rotation is: ", end=' ')

print(rotateArray(arr, 2))

OUTPUT:

Array after left rotation is: [6, 8, 10, 2, 4]

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

Ans.

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()

OUTPUT:

Enter the Array: [2,4,6,8, 10]

The Sum of First and Last Elements of Array [2, 4, 6, 8, 10] is 12

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

Ans.

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()

OUTPUT:

Enter the Array: [2, 4, 6, 8, 10]

Array [2, 4, 6, 8, 10] is Monotonic

Enter the Array: [2, 4, 6, 8, 6]

Array [2, 4, 6, 8, 6] is Not Monotonic