1. Write a Python Program to find sum of array?
2. def \_sum(arr):

  sum=0

for i in arr:

sum = sum + i

 return(sum)

# driver function

arr=[]

# input values to list

arr = [12, 3, 4, 15]

# calculating length of array

n = len(arr)

ans = \_sum(arr)

# display sum

print ('Sum of the array is ', ans)

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

def largest(arr, n):

 return max(arr)

# driver code

arr = [10, 324, 45, 90, 9808]

n = len(arr)

print(largest(arr, n))

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

def split(arr, k):

arr = arr[k:] + arr[:k]

return arr

k = 2

arr = [10, 13, 5, 17]

print("Output array is", split(arr, k))

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

An array is **monotonic** if and only if it is **monotone increasing**, or **monotone decreasing**. Since **p <= q** and **q <= r** implies **p <= r**. So we only need to check adjacent elements to determine if the array is monotone increasing (or decreasing), respectively. We can check each of these properties in one pass.  
To check whether an array A is **monotone increasing**, we’ll check **A[i] <= A[i+1]** for all i indexing from 0 to len(A)-2. Similarly we can check for **monotone decreasing** where **A[i] >= A[i+1]** for all i indexing from 0 to len(A)-2.  
**Note:** Array with **single element** can be considered to be both **monotonic increasing or decreasing**, hence returns “**True**“.

def isMonotonic(A):

return (all(A[i] <= A[i + 1] for i in range(len(A) - 1)) or

all(A[i] >= A[i + 1] for i in range(len(A) - 1)))

# Driver program

A = [6, 5, 4, 4]

# Print required result

print(isMonotonic(A))