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

ANS:

arr = [1, 2, 3, 4, 5];

sum = 0;

#Loop through the array to calculate sum of elements

for i in range(0, len(arr)):

sum = sum + arr[i];

print("Sum of all the elements of an array: " + str(sum));

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

ANS:

#Initialize array

arr = [25, 11, 7, 75, 56];

#Initialize max with first element of array.

max = arr[0];

#Loop through the array

for i in range(0, len(arr)):

#Compare elements of array with max

if(arr[i] > max):

max = arr[i];

print("Largest element present in given array: " + str(max));

1. Write a Python Program for array rotation?

ANS:

def rotate\_array1(arry, K, E):

temp\_1 = []

J = 0

while (J < E):

temp\_1.append(arry[J])

J = J + 1

J = 0

while (E < K):

arry[J] = arry[E]

J = J + 1

E = E + 1

arry[:] = arry[: J] + temp\_1

return arry

# Driver function to test above function

arry = [1, 3, 5, 7, 9, 11, 13, 15]

print ("Array after Rotation by 4 elements is: ", end = ' ')

print (rotate\_array1(arry, len(arry), 4))

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

ANS:

def SplitArray(arr, n, k):

for i in range(0, k):

x = arr[0]

for j in range(0, n-1):

arr[j] = arr[j + 1]

arr[n-1] = x

arr = [15, 40, 15, 16, 50, 36]

n = len(arr)

position = 2

SplitArray(arr, n, position)

for i in range(0, n):

print(arr[i], end = ' ')

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

ANS:

#check if monotone

#function definition

def ismonotone(a):

n=len(a) #size of array

if n==1:

return True

else:

#check for monotone behaviour

if all(a[i]>=a[i+1] for i in range(0,n-1) or a[i]<=a[i+1] for i in range(0,n-1)):

return True

else:

return False

A = [6, 5, 4, 2]

print(ismonotone(A))

b = [6, 2, 4, 2]

print(ismonotone(b))

c=[4,3,2]

print(ismonotone(c))

d=[1]

print(ismonotone(d))A