**BASIC PROGRAMMING ASSIGNMENT\_7-SUBMITTED BY SAMUEL DEVDAS**

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

Ans. l=[]

for i in range(5):

a=int(input('enter any 5 integers:'))

l.append(a)

print('The array of numbers entered is:',l)

print('The sum of the array elements is:',sum(l))

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

Ans. l=[]

for i in range(5):

a=int(input('enter any 5 integers:'))

l.append(a)

print('The array of numbers entered is:',l)

print('The largest element of the array is:',max(l))

3. Write a Python Program for array rotation?

Ans. l=[]

for i in range(5):

a=int(input('enter any 5 integers:'))

l.append(a)

print('The array of numbers entered is:',l)

for i in range(5):

t=l.pop()

l.insert(0,t)

print('The',i+1,'th RIGHT direction rotation of the array is:',l)

for i in range(5):

t=l.pop(0)

l.insert(4,t)

print('The',i+1,'th LEFT direction rotation of the array is:',l)

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

Ans. l=[] #initialize an array

print('Enter one by one, 10 elements to be added to the array:')

for i in range(10): #input func. to take array elements from the user and add to the array

e=input()

l.append(e)

print('The array of numbers entered is:',l)

i=int(input('enter the index(>than the array length) from where the array is split:'))

a=l[0:i] #list slicing operation 1

print('First part:',a)

b=l[i:len(l)+1] #list slicing operation 2

print('Second part:',b)

c=b+a #Concatenation of lists

print('First part addded to end of second part:',c)

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

Ans. l=[]

for i in range(10):

a=int(input('enter any 10 integers:'))

l.append(a)

print('The array of numbers entered is:',l)

for i in range(1,(len(l)-1)):

if l[i-1]<l[i]<l[i+1] or l[i-1]>l[i]>l[i+1]:

if i==len(l)-2:

print('IT IS A MONOTONIC SEQUENCE')

continue

else:

print('NON-MONOTONIC SEQUENCE AT INDEX:',i+1,',','moving from',l[i-1],'to',l[i],'to',l[i+1])

break