

## Programming Assignment-7

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

```
arr = []

arr = [12, 3, 4, 15]

ans = sum(arr)

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

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

```
def largest(arr,n):

    max = arr[0]

    for i in range(1, n):
        if arr[i] > max:
            max = arr[i]
    return max

arr = [10, 324, 45, 90, 9808]
n = len(arr)
Ans = largest(arr,n)
print ("Largest in given array is",Ans)
```

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

```
def rotateArray(arr, n, d):
    temp = []
    i = 0
    while (i < d):
        temp.append(arr[i])
        i = i + 1
    i = 0
    while (d < n):
        arr[i] = arr[d]
        i = i + 1
        d = d + 1
    arr[:] = arr[: i] + temp
    return arr

arr = [1, 2, 3, 4, 5, 6, 7]
print("Array after left rotation is: ", end=' ')
print(rotateArray(arr, len(arr), 2))
```

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

```
def splitArr(a, n, k):
    b = a[:k]
```

```
return (a[k::]+b[::])
```

```
arr = [12, 10, 5, 6, 52, 36]
```

```
n = len(arr)
```

```
position = 2
```

```
arr = splitArr(arr, n, position)
```

```
for i in range(0, n):
```

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

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

```
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)))
```

```
A = [6, 5, 4, 4]
```

```
print(isMonotonic(A))
```