

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

```
#Initialize array
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));
```

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

```
import array as arr

#input values
a = arr.array('i',[3, 24, 11, 2])

# display
print (' Greatest element in the array is ', max(a) )
```

3. Write a Python Program for array rotation?

```
def rotLeft(a, d):
    b = []
    for i in range(-d,len(a)):
        b.append(a[i])
    b.extend(a[0:d])
    return b
rotLeft([1,2,3,4,5,6,7],2)
rotLeft([12,45,20,11,10,56],1)
```

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

```
def splitArr(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
```

```
# main
arr = [12, 10, 5, 6, 52, 36]
n = len(arr)
position = 2
```

```
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)))**

**# Driver program**

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

**# Print required result**

**print(isMonotonic(A))**