

## Kadane's Algorithm : Maximum Subarray Sum in an Array

**Problem Statement:** Given an integer array arr, find the contiguous subarray (containing at least one number) which has the largest sum and returns its sum and prints the subarray.

### 3.Kadane's Algorithm

```
from os import *
from sys import *
from collections import *
from math import *

from sys import stdin,setrecursionlimit
setrecursionlimit(10**7)

def maxSubarraySum(arr, n) :
    sum=0
    maxi=0
    for i in range(n):
        sum=sum+arr[i]

        if sum>maxi:
            maxi=sum

        if sum<0:
            sum=0
```

return maxi