https://course.acciojob.com/idle?question=8bff3159-40be-4f88-92f0-5c844894b12e

- MEDIUM
- Max Score: 40 Points

Maximum Sum Subarray

Given an array `arr` of size `N`. The task is to find the sum of the contiguous subarray within a `arr` with the largest sum.

Input Format

First line consists of an integer `n`

Second line consists of `n` spaced integers

Output Format

Print the maximum subarray sum present in the array

Example 1

Input

```
5
2 3 1 -1 0
```

Output

```
6
```

Explanation

Maximum subarray sum = 2 + 3 + 1

Example 2

Input

```
8
-2 -3 4 -1 -2 1 5 -3
```

Output

```
7
```

Explanation

Maximum subarray sum = 4-1-2+1+5

Constraints

```
1 <= n <= 10^4
```

```
-100 <= arr[i] <= 100
```

Topic Tags

- Arrays

My code

```
// n java
// Java program to print largest contiguous array sum
import java.util.*;

public class Main {

  // Driver Code
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    int n = sc.nextInt();
    int[] arr = new int[n];
    for (int i = 0; i < n; i++) arr[i] = sc.nextInt();
    sc.close();
    System.out.println(maxSubArraySum(arr));
  }

  // Function Call
  static int maxSubArraySum(int a[]) {
    // your code here
        int n=a.length;
        int ans=0;
        int sum=0;
        for(int i=0;i<n;i++)
                {
                        sum=sum+a[i];
                        if(sum>ans)
                                ans=sum;
```

```
                    if(sum<0)
                        sum=0;
                }
            return ans;
    }
}
```