

## 5. Maximum Subarray

Given an integer array `nums` , find the contiguous subarray (containing at least one element) that has the largest sum and return its sum.

Example: Input: `nums = [-2, 1, -3, 4, -1, 2, 1, -5, 4]` Output: 6

// Explanation: [4, -1, 2, 1] has the largest sum = 6.

### Code

```
class Solution {
    public int maxSubArray(int[] nums) {
        int max=Integer.MIN_VALUE;
        int s=0;
        for(int i=0;i<nums.length;i++){
            s+=nums[i];
            max=Math.max(max,s);
            if(s<0){
                s=0;
            }
        }
        return max;
    }
}
```