

69. Maximum Subarray

Given an integer array `nums`, find the subarray which has the largest sum and return *its sum*.

Code:

```
def maxSubArray(nums):
    if not nums:
        return 0

    max_sum = float('-inf')
    current_sum = 0

    for num in nums:
        current_sum = max(num, current_sum + num)
        max_sum = max(max_sum, current_sum)

    return max_sum
nums = [-2, 1, -3, 4, -1, 2, 1, -5, 4]
print(maxSubArray(nums))
```

Output:

6

Time Complexity:

- $T(n) = O(n)$