

Maximum Subarray (53)

we need to find the sum of the subarray with maximum sum. We can notice three things

- (i) Adding a negative or positive number to an already negative subarray does not help.
- (ii) so, we check if the sum of previous elements is negative. if not, we add the current element. If it is negative, we leave the current element as it is.
- (iii) max of this new modified array is our answer.

CODE

```
int maxSubarray ( vector<int> & nums ) {  
    for (int i=1; i < nums.size(); i++) {  
        if (nums[i-1] > 0) {  
            nums[i] = nums[i] + nums[i-1]  
        }  
    }  
    return *max_element ( nums.begin(), nums.  
                           end() )  
}
```