Stock Portfolio Optimizer

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Submitted by: Tiruvalluri Nandini – 22KQ1A0733

Details of Project: I'm implementing this project by using Python Programming Language.

Code:

max_sum.py

```
n=list(map(int,input().split()))
max_sum=float('-inf')
sum=0
m=len(n)
for i in range(m):
    sum=sum+n[i]
    if sum<0:
        sum=0
    elif sum>max_sum:
        max_sum=sum
print(max_sum)
```

Input and output:

1 -2 3 10 -4 7 2 -5

Output:

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Explanation:

In this program I have implemented project name which is nothing but stock portfolio optimizer.

→This program finds the maximum sum of a subarray within a given array of integers.

→ It uses Kadane' s algorithm, Which iterates through the array . Initially read input from the user.

→We take 'max_sum' as '-inf' (negative infinity)because we want to ensure that the first sum we calculate will be greater than it.

→ This is because we're looking for the maximum sum, and '-inf' is the smallest possible value and also sum is initially taken as zero.

→Adding each element to a running sum. If the sum becomes negative, it resets to 0.

→The maximum sum found is stored and printed at the end.

Conclusion:

Finally I have got the desired output maximum sum subarray is :

1 -2 3 10 -4 7 2 -5

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