STOCK PORTFOLIO OPTIMIZER

Date: 6th June 2024

Submitted by: Boyina Sai Teja **&**
22KQ1A0741

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

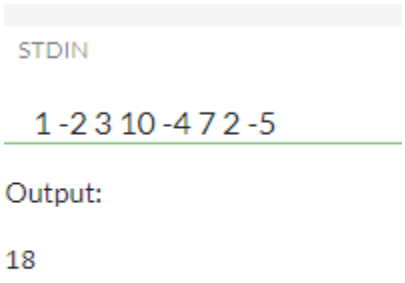
Code

SPO.PY

```
def max_subarray_sum(n,n1):
  max=int()
  sum=0
  for i in range(0,n1):
    sum=sum+n[i]
    if max<sum:
      max=sum
    if sum<0:
      sum=0
  return max
n=list(map(int,input().split()))
print(max_subarray_sum(n,len(n)))
```

Input and Output

STOCK PORTFOLIO OPTIMIZER



Explanation:

The function '**max_subarray_sum**(n,n1)' is designed to find the maximum sum with a given array n of n1 length.This problem uses the "**Kadane's Algorithm**".

The function takes the two arguments '**n**' and '**n1'**,n represent the number elements in the list and n1 represent length of list.Then initializing variables '**max'** and '**sum'**.

The '**for'** loop iterate over ecah statements and return the max value according to initialization,takes input from user in list format and calls the max_subarray_sum then print result.

Conclusion:

STOCK PORTFOLIO OPTIMIZER

The function “max_subarray_sum” uses **kadane’s Algorithm** to find the maximum sum subarray by given list of integers.It over list with help of if loop and return the resultant value then print the result.