

## STOCK PAIR FINDER

**Date:** 7<sup>th</sup> June 2024

**Submitted by:** PONDUGULA MANOHAR REDDY (22KQ1A031)

**Details of project:** I'm implementing this project by using python programming

*Language*

**Code:**

```
Stock Pair Finder.py +
1  # Online Python - IDE, Editor, Compiler, Interpreter
2  def spf(a,t):
3      s=set()
4      p=[]
5      for i in a:
6          c=t-i
7          if c in s:
8              p.append((i,c))
9              s.add(i)
10     return p
11 a=list(map(int,input().split()))
12 t=int(input())
13 res=spf(a,t)
14 print(res)
15
```

***Input and output:***

STDIN

1 2 3 4 5  
6

---

Output:

[(4, 2), (5, 1)]



**Explanation:** In this program I have implemented the project **STOCK PAIR FINDER**

which is nothing but to print the pair of stocks by the target value. For that initially I have defined the function as `def_spf`. And we have to print the output pair of stocks. First I implement the user defined function is `def_spf`.

Next step I initialize the empty set() it will store the elements in a and like this I used `p[]` to store the pair of integers as sum is equal then I used the looping statement is `for()` this way the loop will iterate through each element of I in list a. The loop will true it count the target value — user input I next the conditional statement is checks the count in set() it will return the I value and c value in the `p[]` as list after this it will add to the set() this returns p value

Finally this implemented program is takes the input from the user and finding the stock pair the loop will run till the target value is equal to the list.

**Conclusion:**

Finally I got the desired output **[(4,2) , (5,1)]**