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**EXP 4: Write the python program for Cript-Arithmetic problem**

**AIM:**

To Write the python program for Cript-Arithmetic problem

**PROGRAM:**

from itertools import permutations

def solve\_cryptarithmetic():

letters = 'SENDMORY'

digits = range(10)

for perm in permutations(digits, len(letters)):

s, e, n, d, m, o, r, y = perm

if s == 0 or m == 0:

continue

send = s\*1000 + e\*100 + n\*10 + d

more = m\*1000 + o\*100 + r\*10 + e

money = m\*10000 + o\*1000 + n\*100 + e\*10 + y

if send + more == money:

print(f"SEND: {send}, MORE: {more}, MONEY: {money}")

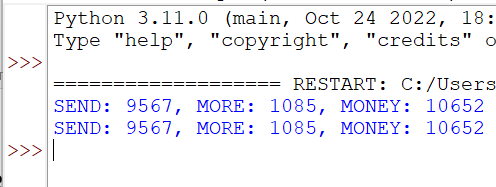
return True

print("No solution found")

return False

solve\_cryptarithmetic()

OUTPUT:



**RESULT:**

Thus, the output is verified for Cript-Arithmetic problem