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

**Program:**

import itertools

def solve\_cryptarithmetic():

letters = 'SENDMORY' # unique letters

digits = range(10)

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

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

if s == 0 or m == 0:

continue # leading digit can't be zero

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}")

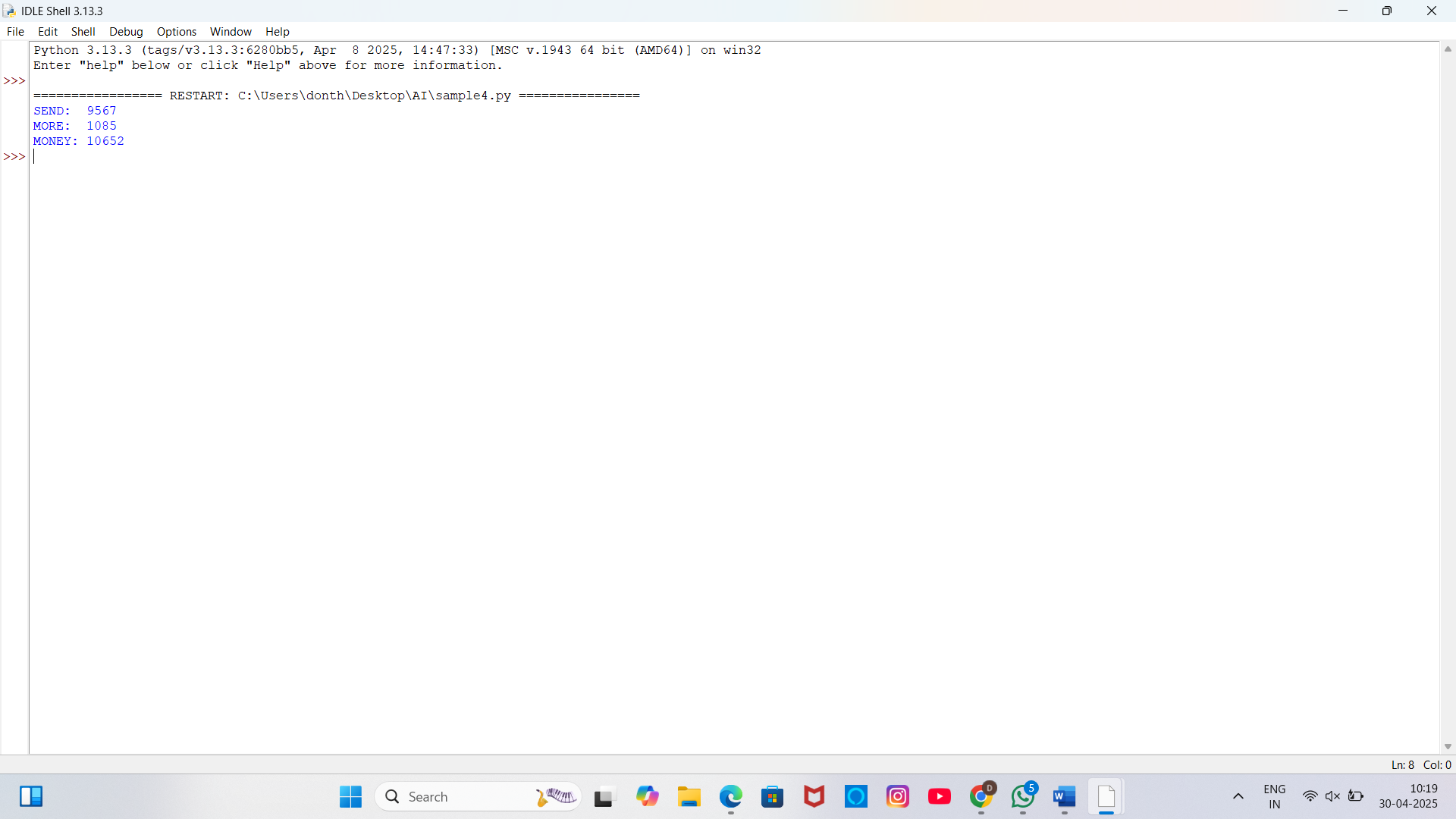
print(f"MORE: {more}")

print(f"MONEY: {money}")

return

solve\_cryptarithmetic()

**output:**

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