EXPERIMENT 3: cript algorithm

Aim: Implement an Algorithm in Python for solving the CRIPT ALGORITHM.

```
from itertools import permutations

def solve_cryptarithmetic(puzzle):
    unique_chars = set(char for word in puzzle.split() for char in word)

    for perm in permutations('0123456789', len(unique_chars)):
        char_to_digit = {char: digit for char, digit in zip(unique_chars, perm)}

        if any(char_to_digit[word[0]] == '0' for word in puzzle.split()):
            continue

        equation = ''.join(word.translate(str.maketrans(char_to_digit)) for word in
puzzle.split())
        if eval(equation):
            return char_to_digit

    return None
puzzle = "SEND + MORE == MONEY"
solution = solve_cryptarithmetic(puzzle)

if solution:
    print("Solution found:")
    for char, digit in solution.items():
        print(f"{char} = {digit}")
else:
    print("No solution exists.")
```

Output:

Solution found:

O = 0

D = 1

M = 2

R = 3

= = 4

S = 5

N = 6

E = 7

+ = 8

Y = 9

Result:

Code has been Implemented successfully.