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1 # PE29 Vasu Kalariya
2 # AI lab Assi 3
3
4 def solutions():
5     letters = ('s', 'e', 'n', 'd', 'm', 'o', 'r', 'y')
6     all_solutions = list()
7     for s in range(9, -1, -1):
8         for e in range(9, -1, -1):
9             for n in range(9, -1, -1):
10                 for d in range(9, -1, -1):
11                     for m in range(9, 0, -1):
12                         for o in range(9, -1, -1):
13                             for r in range(9, -1, -1):
14                                 for y in range(9, -1, -1):
15                                     if len(set([s, e, n, d, m, o, r, y])) == 8:
16                                         send = 1000 * s + 100 * e + 10 * n + d
17                                         more = 1000 * m + 100 * o + 10 * r + e
18                                         money = 10000 * m + 1000 * o + 100 * n + 10 *
19                                         e + y
20
21                                         if send + more == money:
22                                             print(list([s, e, n, d, m, o, r, y]))
23                                             all_solutions.append((send, more, money))
24
25     return all_solutions
26
27 print(solutions())
28
29 """
30 Output
31
32 PS C:\Users\kalar> & python "f:/T9/AI/Lab 3/PE29_VasuKalariya_AI_LAB Assi 3.py"
33 [9, 5, 6, 7, 1, 0, 8, 2]
34 [(9567, 1085, 10652)]
35 PS C:\Users\kalar>
36
37 """

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