Padlock puzzle

Problem 1:

Program in python:

def padlock\_solve(number, checknumber, correct\_number, correct\_position\_number):

count\_correct\_number = 0

count\_correct\_position\_number = 0

findnumber = str(number).zfill(len(checknumber))

for i in range(len(checknumber)):

if findnumber[i] in checknumber:

count\_correct\_number += 1

if findnumber[i] == checknumber[i]:

count\_correct\_position\_number += 1

return correct\_number == count\_correct\_number and correct\_position\_number == count\_correct\_position\_number

for number in range(1000):

if padlock\_solve(number,'147',1,0) and padlock\_solve(number,'189',1,1) and padlock\_solve(number,'964',2,0) and padlock\_solve(number,'523',0,0) and padlock\_solve(number,'286',1,0):

print(" padlock puzzle solution: " + str(number).zfill(3))

Description:

Here in this program padlock\_solve is the function that is used to check the correct number. We receive the number, check number, correct\_number, correct\_position\_number as an argument. Then we send each number to the padlock\_solve function. Inside the function, we check whether the placement of the number is correct or not. If the number is correct then zfill is inserted with 000 at first and we push the correct number to the findnumber. Only if the position and number are correct.

Puzzle problem 2

Program code:

def padlock\_solve(number, checknumber, correct\_number, correct\_position\_number):

count\_correct\_number = 0

count\_correct\_position\_number = 0

findnumber = str(number).zfill(len(checknumber))

for i in range(len(checknumber)):

if findnumber[i] in checknumber:

count\_correct\_number += 1

if findnumber[i] == checknumber[i]:

count\_correct\_position\_number += 1

return correct\_number == count\_correct\_number and correct\_position\_number == count\_correct\_position\_number

for number in range(1000):

if padlock\_solve(number,'682',1,1) and padlock\_solve(number,'614',1,0) and padlock\_solve(number,'206',2,0) and padlock\_solve(number,'738',0,0) and padlock\_solve(number,'380',1,0):

print(" padlock puzzle solution: " + str(number).zfill(3))

Description:

Problem 2 is same as one but parameters passing to the function are different