1. def is\_symmetrical(in\_num):

if str(in\_num) == str(in\_num)[::-1]:

print(f'{in\_num} ➞ {True}')

else:

print(f'{in\_num} ➞ {False}')

is\_symmetrical(7227)

is\_symmetrical(12567)

is\_symmetrical(44444444)

is\_symmetrical(9939)

is\_symmetrical(1112111)

Output:

7227 ➞ True

12567 ➞ False

44444444 ➞ True

9939 ➞ False

1112111 ➞ True

1. def multiply\_nums(in\_string):

out\_string = in\_string.replace(' ','').split(',')

out\_num = 1

for ele in out\_string:

out\_num \*= int(ele)

print(f'{in\_string} ➞ {out\_num}')

multiply\_nums("2, 3")

multiply\_nums("1, 2, 3, 4")

multiply\_nums("54, 75, 453, 0")

multiply\_nums("10, -2")

Output:

2, 3 ➞ 6

1, 2, 3, 4 ➞ 24

54, 75, 453, 0 ➞ 0

10, -2 ➞ -20

1. def square\_digits(in\_num):

in\_list = [str(int(ele)\*\*2) for ele in str(in\_num)]

out\_list = ''.join(in\_list)

print(f'{in\_num} ➞ {int(out\_list)}')

square\_digits(9119)

square\_digits(2483)

square\_digits(3212)

Output:

9119 ➞ 811181

2483 ➞ 416649

3212 ➞ 9414

1. def setify(in\_list):

out\_list = sorted(set(in\_list))

print(f'{in\_list} ➞ {out\_list}')

setify([1, 3, 3, 5, 5])

setify([4, 4, 4, 4])

setify([5, 7, 8, 9, 10, 15])

setify([3, 3, 3, 2, 1])

Output:

[1, 3, 3, 5, 5] ➞ [1, 3, 5]

[4, 4, 4, 4] ➞ [4]

[5, 7, 8, 9, 10, 15] ➞ [5, 7, 8, 9, 10, 15]

[3, 3, 3, 2, 1] ➞ [1, 2, 3]

1. def mean(in\_num):

in\_list = [int(ele) for ele in str(in\_num)]

out\_num = sum(in\_list)/len(str(in\_num))

print(f'Mean of {in\_num} ➞ {out\_num:.0f}')

mean(42)

mean(12345)

mean(666)

Output:

Mean of 42 ➞ 3

Mean of 12345 ➞ 3

Mean of 666 ➞ 6