Question 1

Create a function that takes a number as an argument and returns True or False depending on whether the number is symmetrical or not. A number is symmetrical when it is the same as its reverse.

**Examples**

is\_symmetrical(7227) ➞ True

is\_symmetrical(12567) ➞ False

is\_symmetrical(44444444) ➞ True

is\_symmetrical(9939) ➞ False

is\_symmetrical(1112111) ➞ True

def is\_symmetrical(num) :

return str(num) == str(num)[::-1]

print(is\_symmetrical(7227))

print(is\_symmetrical(12567))

Question 2

Given a string of numbers separated by a comma and space, return the product of the numbers.

### Examples

multiply\_nums("2, 3") ➞ 6

multiply\_nums("1, 2, 3, 4") ➞ 24

multiply\_nums("54, 75, 453, 0") ➞ 0

multiply\_nums("10, -2") ➞ -20

def multiply\_nums(string) :

mul = 1

L = [int(x) for x in string.split(', ')]

for i in range(len(L)) :

mul = mul \* (L[i])

return mul

print(multiply\_nums("2, 3"))

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

print(multiply\_nums("54, 75, 454, 0"))

print(multiply\_nums("10, -2"))

Question 3

Create a function that squares every digit of a number.

### Examples

square\_digits(9119) ➞ 811181

square\_digits(2483) ➞ 416649

square\_digits(3212) ➞ 9414

### Notes

The function receives an integer and must return an integer.

def square\_digits(in\_num):

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

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

print(int(out\_list))

square\_digits(9119)

Question 4

Create a function that sorts a list and removes all duplicate items from it.

### Examples

setify([1, 3, 3, 5, 5]) ➞ [1, 3, 5]

setify([4, 4, 4, 4]) ➞ [4]

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

setify([3, 3, 3, 2, 1]) ➞ [1, 2, 3]

def setify(l):

return sorted(set(l))

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

Question 5

Create a function that returns the mean of all digits.

### Examples

mean(42) ➞ 3

mean(12345) ➞ 3

mean(666) ➞ 6

### Notes

* The mean of all digits is the sum of digits / how many digits there are (e.g. mean of digits in 512 is (5+1+2)/3(number of digits) = 8/3=2).
* The mean will always be an integer.

def mean(num):

l= [int(i) for i in str(num) ]

out=sum(l)//len(str(num))

return out

print(mean(42))

print(mean(12345))

print(mean(666))