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

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

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.

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]

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.

**Solution: 1**

def is\_symmetrical(n):

list\_n = []

x = n

while(n!=0):

r = n%10

list\_n.append(r)

n = n//10

if(list\_n == list\_n[::-1]):

return("True")

else:

return("False")

is\_symmetrical(12567)

**Solution: 2**

def multiply\_num(n):

n\_new = n.split(", ")

pro = 1

for i in list(n\_new):

pro = pro \* int(i)

return(pro)

multiply\_num("2, 3")

**Solution: 3**

def square\_digits(n):

x = n

li\_n =[]

li\_n1 = []

while(n!=0):

r = n%10

li\_n.append(r)

n= n//10

li\_n.reverse()

for i in li\_n:

li\_n1.append(i\*\*2)

return(("".join([str(i) for i in li\_n1])))

square\_digits(2483)

**Solution: 4**

def setify(l):

return(sorted(set(l)))

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

**Solution: 5**

def mean(num):

x = num

sum = 0

c = 0

avg = 0

while(num!=0):

r = num%10

sum = sum + r

num = num//10

c = c+1

avg = int(sum/c)

return(avg)

mean(666)