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

**Ans:**

def is\_symmetrical(num):

a\_num=num

sym=0

d=0

while num>0:

d=num%10

sym=sym\*10+d

num=num//10

if a\_num==sym:

print(True)

else:

print(False)

is\_symmetrical(1112111)

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

**Ans:**

def multiply\_nums(string):

l=string.split(",")

mul=1

for i in l:

mul=mul\*int(i)

print(mul)

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.

**Ans:**

def square\_digits(num):

string=str(num)

l=[]

for i in string:

l.append(str(int(i)\*\*2))

print("".join(l))

square\_digits(3212)

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]

**Ans:**

def setify(lst):

lst.sort()

dist=[]

for i in lst:

if i not in dist:

dist.append(i)

print(dist)

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

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.

**Ans:**

def mean(num):

sum=0

count=0

while num>0:

d=num%10

sum+=d

num=num//10

count+=1

print(sum//count)

mean(666)