**Question1**

**Create a function that takes a list of strings and integers, and filters out the list so that it returns a list of integers only.**

**Examples**

**filter\_list([1, 2, 3, "a", "b", 4]) ➞ [1, 2, 3, 4]**

**filter\_list(["A", 0, "Edabit", 1729, "Python", "1729"]) ➞ [0, 1729]**

**filter\_list(["Nothing", "here"]) ➞ []**

l=list(input().split(','))  
l1=[i for i in l if i.isdigit()]  
l1

**Question2**

**Given a list of numbers, create a function which returns the list but with each element's index in the list added to itself. This means you add 0 to the number at index 0, add 1 to the number at index 1, etc...**

### Examples

**add\_indexes([0, 0, 0, 0, 0]) ➞ [0, 1, 2, 3, 4]**

**add\_indexes([1, 2, 3, 4, 5]) ➞ [1, 3, 5, 7, 9]**

**add\_indexes([5, 4, 3, 2, 1]) ➞ [5, 5, 5, 5, 5]**

Question3

Create a function that takes the height and radius of a cone as arguments and returns the volume of the cone rounded to the nearest hundredth. See the resources tab for the formula.



### Examples

cone\_volume(3, 2) ➞ 12.57

cone\_volume(15, 6) ➞ 565.49

cone\_volume(18, 0) ➞ 0

r=float(input("Enter he radius: "))  
h=float(input("Enter the height: "))  
volume=(22/7)\*(r\*r\*h)/3  
print(round(volume,2))

**Question4**

**This Triangular Number Sequence is generated from a pattern of dots that form a triangle. The first 5 numbers of the sequence, or dots, are:**

**1, 3, 6, 10, 15**

**This means that the first triangle has just one dot, the second one has three dots, the third one has 6 dots and so on.**

**Write a function that gives the number of dots with its corresponding triangle number of the sequence.**

### Examples

**triangle(1) ➞ 1**

**triangle(6) ➞ 21**

**triangle(215) ➞ 23220**

def triangular(n):  
 j=1  
 k=1  
 for i in range(1,n+1):  
 a=k  
 j=j+1  
 k=k+j  
 print(a)  
n=int(input())  
triangular(n)

**Question5**

**Create a function that takes a list of numbers between 1 and 10 (excluding one number) and returns the missing number.**

### Examples

**missing\_num([1, 2, 3, 4, 6, 7, 8, 9, 10]) ➞ 5**

**missing\_num([7, 2, 3, 6, 5, 9, 1, 4, 8]) ➞ 10**

**missing\_num([10, 5, 1, 2, 4, 6, 8, 3, 9]) ➞ 7**

def missingno(a):  
 n=len(a)  
 total=(n+1)\*(n+2)/2  
 summ=sum(a)  
 return total-summ  
l=list(map(int,input().split(',')))  
print(int(missingno(l)))