Assignment 4.1

Q1: area = (s\*(s-a)\*(s-b)\*(s-c)) \*\* 0.5

Function to take the length of the sides of triangle from user should be defined in the parent

class and function to calculate the area should be defined in subclass.

Answer :

class TriangleInput:

def \_\_init\_\_(self):

self.sides=[]

a=input("Enter Side 1 :")

b=input("Enter Side 2 :")

c=input("Enter Side 3 :")

self.sides.append(float(a))

self.sides.append(float(b))

self.sides.append(float(c))

#print(self.sides)

class AreaTriangle(TriangleInput):

def \_\_init\_\_(self):

TriangleInput.\_\_init\_\_(self)

def findArea(self):

a, b, c = self.sides

# calculate the semi-perimeter

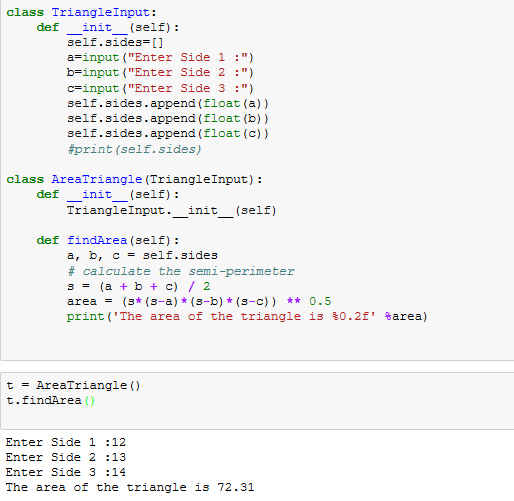
s = (a + b + c) / 2

area = (s\*(s-a)\*(s-b)\*(s-c)) \*\* 0.5

print('The area of the triangle is %0.2f' %area)

t = AreaTriangle()

t.findArea()



Q2: Write a function filter\_long\_words() that takes a list of words and an integer n and returns the list

of words that are longer than n.

Answer :

def words\_longer(lista,n):

words=list(filter(lambda word : len(word)>n, lista))

return words

lword = []

while True:

word= input('enter the word : ')

if word == 'break':

break

else:

lword.append(word)

num=int(input('Enter the number :'))

print(words\_longer(lword,num))

