Лаб 4 Савчин Мирсолав (8 вар)

Завд 1

8 Обчислити площу та периметр ромба, якщо задано довжину сторін та один з кутів.

import math  
  
side\_length = float(input("Input side length: "))  
angle\_value = float(input("Input angle value: "))  
  
rhomb\_P = 4\*side\_length  
rhomb\_S = math.sin(math.radians(angle\_value))\*side\_length\*side\_length  
  
print("P: {0}, S: {1}" .format(rhomb\_P, rhomb\_S))

Завд 2



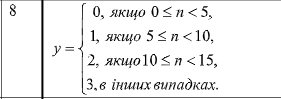
number\_a = float(input("input value of a: "))  
number\_b = float(input("input value of b: "))  
number\_c = float(input("input value of c: "))  
  
result = (number\_a if number\_a < number\_b else number\_b) + (number\_a if number\_a > number\_b else number\_b)\*\*2  
  
print("your result is number: ", result)

Завд 3



from math import sqrt  
  
x1 = float(input("input x1 value: "))  
y1 = float(input("input y1 value: "))  
x2 = float(input("input x2 value: "))  
y2 = float(input("input y2 value: "))  
x3 = float(input("input x3 value: "))  
y3 = float(input("input y3 value: "))  
  
  
def calculate\_side\_length(x1, y1, x2, y2):  
 return sqrt((x2 - x1)\*\*2 + (y2 - y1)\*\*2)  
  
  
side1 = calculate\_side\_length(x1, y1, x2, y2)  
side2 = calculate\_side\_length(x2, y2, x3, y3)  
side3 = calculate\_side\_length(x3, y3, x1, y1)  
  
maxSide = side1  
if (side2 > maxSide):  
 maxSide = side2  
elif (side3 > maxSide):  
 maxSide = side3  
  
print(maxSide)

Завд 4



number = float(input("pls type number: "))  
  
if 0 <= number < 5:  
 result = 0  
elif 5 <= number < 10:  
 result = 1  
elif 10 <= number < 15:  
 result = 2  
else:  
 result = 3  
  
print("result", result)