

In [10]: 1 # Calculate Area of Triangle

In [11]: 1 height = float(input("Enter height of Triangle: ")) #This Line prompts the user to enter the height of the triangle
2
3 base = float(input("Enter base of Triangle: ")) #This Line prompts the user to enter the base of the triangle
4
5 #float(...) converts the user input (which is initially a string) into a floating-point number and assigns it to the variable
6
7 area = (0.5)*base*height
8 #This Line calculates the area of the triangle using the formula for the area of a triangle, which is (base * height) / 2 or
9
10 print("Area pf triangle: ", area) #This Line prints the calculated area of the triangle.

Enter height of Triangle: 11
Enter base of Triangle: 99
Area pf triangle: 544.5

In [12]: 1 # Swap two variable in Python
2 # With using Third Variable

In [13]: 1 x = 13 #This Line assigns the integer value 13 to the variable x.
2 y = 12 #This Line assigns the integer value 12 to the variable y.
3
4 temp = x #This Line creates a new variable temp and assigns the current value of x (which is 13) to temp.
5 print("Value of temp variable is ", temp) #This Line prints the message "Value of temp variable is " along with the value stored in temp.
6
7 x = y #This Line assigns the value of y (which is 12) to the variable x, effectively changing the value of x from 13 to 12.
8 print("Value of x is ", x) #This Line prints the message "Value of x is " along with the current value of x, which is 12 after the assignment.
9
10 y = temp #This Line assigns the value stored in the variable temp (which is 13) back to the variable y, reverting y from 12 to 13.
11 print("Value of y is ", y) #This Line prints the message "Value of y is " along with the current value of y, which is 13 after the assignment.

Value of temp variable is 13
Value of x is 12
Value of y is 13

In [14]: 1 # Without using third variable

In [16]: 1 x = 11 #This Line assigns the integer value 11 to the variable x.
2 y = 99 #This Line assigns the integer value 99 to the variable y
3
4 x,y = y,x
5 #The values on the right side of the assignment (y, x) form a tuple (99, 11),
6 # and they are assigned to the variables on the left side of the assignment (x, y) in order.
7 # This means y gets the value 99, and x gets the value 11.
8
9 print("Value of x is ", x) #This Line prints the message "Value of x is " along with the current value of x, which is now 99
10 print("Value of y is ", y) #This Line prints the message "Value of y is " along with the current value of y, which is now 11

Value of x is 99
Value of y is 11

In []: 1