### Variables

### Programming Assignment

The area of a triangle is given by the formula Area = 1/2 \* Base \* Height. Using the IDLE development environment, create a Python script named t\_area . Your script must calculate the area of a triangle and display the results of the calculation. The triangle that your script must calculate the areas for has a base of 12 inches and a height of 16 inches. IDLE has both an interactive mode and a script mode. You must use the script mode to develop your script.

Your script must use (at a minimum) the following three variable names.

1. area - this variable will contain the results of the calculation which will be the area of the triangle.
2. base – this variable will contain the length of the triangle base. You must set the value of this variable to 12.
3. height – this variable will contain the height of the triangle. You must set the value of this variable to 16.

Your script must have at least 2 comments that describe what is happening in your script. Comments may describe the assignment of a value to a variable, the computation of area and the assignment of the result to the variable area, or the display of the result.

Your script must display the results of your calculation computing the area of the triangle using the print statement. You must code your script, test it, and if required, debug it. When you have successfully completed this assignment please capture the output displayed by your script. You can copy and paste the output from the IDLE window into a document and attach it to your assignment.

Solution:

#Declare a variable "base" and assign the value of 12 to it

base=12.0

#Declare a variable "height" and assign the value of 16 to it

height=16

#Calculate the area of triangle using formula: area = base \* height \* 1/2

area=base\*height\*1/2

#Display the area of the triangle

print(area)

Outcome:

Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:57:15) [MSC v.1915 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

============ RESTART: C:/Users/ada/Desktop/Variables excercise.py ============

96.0

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