CSCI 107, Second Practicum – October 21, 2022

Submit your solutions in a file named YourFirstName-YourLastName.py to the CSCI 107 **Practicum 2 Dropbox** *no later than 3:00 p.m.*

Question One. 25 points. Write a program that prompts the user for a word and then uses an appropriate function in the **keyword module** to determine whether or not the user's word is a python keyword. Two sample runs of the program appear below. Match the output format exactly.

```
==================== RESTART: C:\Users\n57g588
Enter a word: def
That is a python keyword.
>>>
==================== RESTART: C:\Users\n57g588
Enter a word: csci
That is not a python keyword.
>>>
```

Question Two. 35 points. The earth's latitudes are divided into three zones. The Tropical Zone runs from latitude 0.0 to latitude 23.5, the Temperate Zone from just above latitude 23.5 to latitude 66.5 and the Polar Zone from just above latitude 66.5 to latitude 90.0. Supply a function that works with the following code to produce the output below. The missing function should work properly for all non-negative numbers. Match the output format exactly.

for latitude in range (0, 101, 20):
   print("Latitude:", latitude, "Classification:", determine_zone(latitude))

```
>>>
==================== RESTART: C:\Users\n57g588\Desktop
Latitude: 0 Classification: Tropical Zone
Latitude: 20 Classification: Tropical Zone
Latitude: 40 Classification: Temperate Zone
Latitude: 60 Classification: Temperate Zone
Latitude: 80 Classification: Polar Zone
Latitude: 100 Classification: Illegal Latitude
>>>
```

Question Three. 40 points. Supply the missing function for the program below. The missing function should draw a sprite that is centered at (0, 0). The missing function is provided with four pieces of information: the length of each leg (e.g. 100), the color of each leg (e.g. "purple"), the width of each leg (e.g. 5) and the number of legs (e.g. 7). All legs should be evenly spaced and the function should work for any set of legal values.

import turtle

draw_lines(100, "purple", 5, 7)