CSCI 104 Python Programming Assignment #1B

Purpose: This is our second experiment on Python programming. Based on your experiences with the previous Python programming assignment (#1A), you need to write a very similar program. **You'll gain the full credit for this lab assignment if your program works perfectly.**

Overview: We want to write a Python program that can first ask the user to provide the information of the radius of a circle and then inform the user the area and the perimeter of the circle. Note that given *r* as the radius, by approximating π as 3.14 you can calculate the area as *3.14 * r * r* and the perimeter as *2 * 3.14 * r*.

Stage 1. Write the program as a collection individual instructions:

Invoke IDLE Python GUI to work with Python. (Note: If your computer runs Windows 8 and cannot locate IDLE Python GUI, try to get to `C:\Python27\Lib\idlelib\idle.py` and double click it to open up the **Python IDLE environment** instead.)

Go to ***File => New Window*** under IDLE Python GUI to invoke a new editing window.

Write down the program as a collection individual instructions for doing the following things one by one in order:

a) Use the *print* command to print a message to ask the user to enter the radius of the circle.

b) Use the *raw_input* function to read a string entered by the user and store the string into a variable *RadiusString*.

c) Use the *float* function to extract the float value from the *RadiusString* and store the value into another variable *r*.

d) Calculate area based on the value stored in *r* and then store the result into another variable *area*.

e) Calculate perimeter based on the value stored in *r* and then store the result

into another variable *perimeter*.

f) Print a message on the screen to inform the user the area and the perimeter of the circle.

Stage 2. Run and debug the program to make it work:
Save the program as a Python program file, for example program1B.py. Under the new window, go to ***Run*** **=>** ***Run Module*** to run the whole program you have written above. Make sure your program can do what we want perfectly. If you encounter mistakes while running the program or if the results are not right, revisit your program and revise it to try to make it work.

Stage 3: Submission of your work:
In your weekly progress report,
(i) report how much time you have spent in this Python Programming #1B and **whether you have come to the class to spend 2 hours on it in the lab,**
(ii) report any problems you encountered in the process and whether the program you got in Stage 2 is working or not, and
(iii) copy and paste the contents of the Python program you got in Stage 3 into the weekly report.