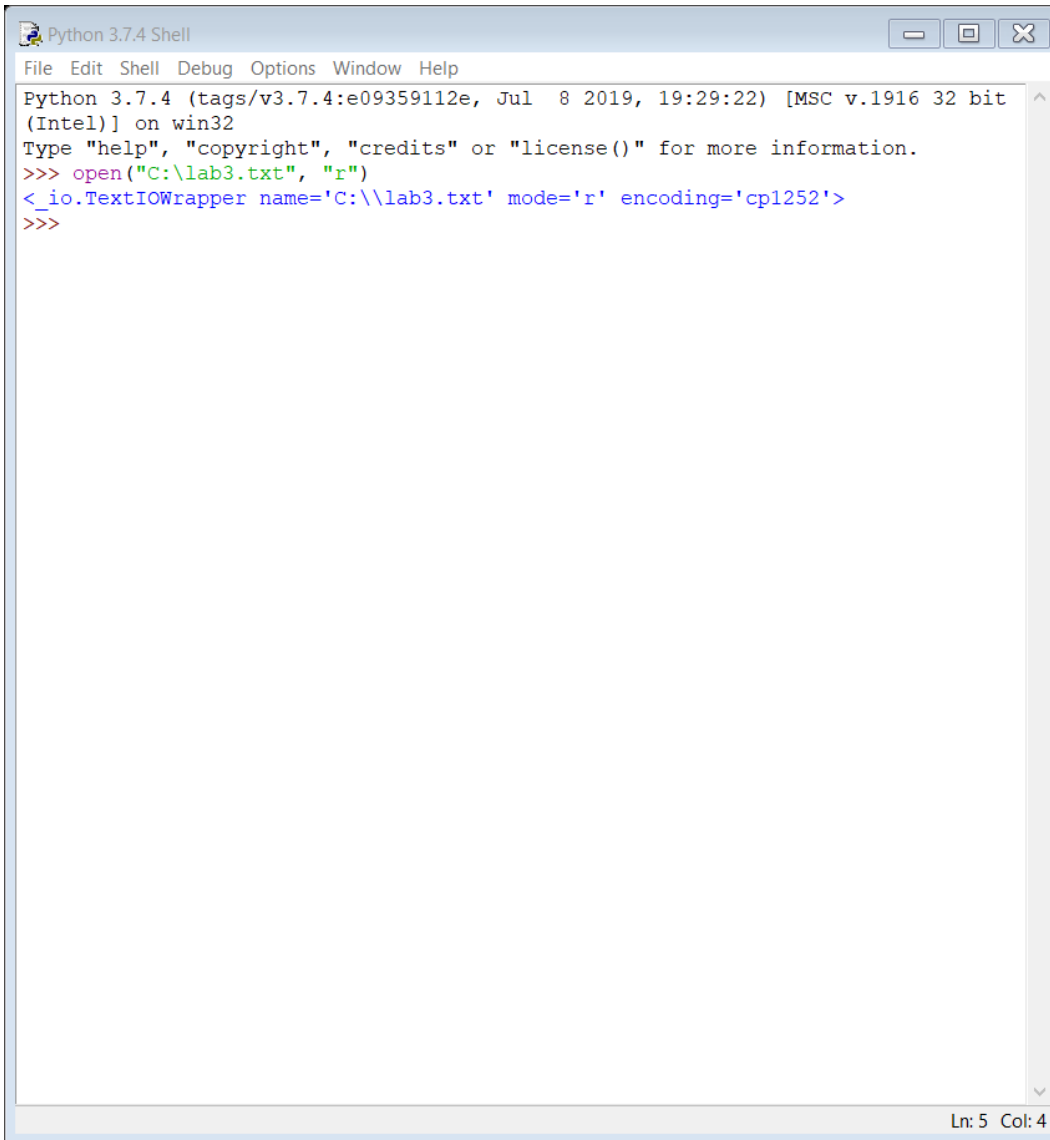


**Task 1: Read data in from the provided text:**

A screenshot of a Python 3.7.4 Shell window. The window has a title bar that says "Python 3.7.4 Shell" and standard Windows window controls (minimize, maximize, close). Below the title bar is a menu bar with "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main area of the window contains the following text:

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit  
(Intel)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>> open("C:\\lab3.txt", "r")  
<_io.TextIOWrapper name='C:\\lab3.txt' mode='r' encoding='cp1252'>  
>>>
```

The text is color-coded: "open" is pink, the file path and mode are green, and the return object is blue. At the bottom right of the window, there is a status bar that says "Ln: 5 Col: 4".

## Task 2: Create a class for each shape found in the text file:

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> open("C:\\lab3.txt", "r")
<_io.TextIOWrapper name='C:\\lab3.txt' mode='r' encoding='cp1252'>
>>> class Rectangle:
    def __init__(self, l, w):
        self.l = l
        self.w = w
    def getArea(self):
        return self.l * self.w

>>> class Circle:
    def __init__(self, r):
        self.r = r
    def getArea(self):
        return self.radius**2*3.14

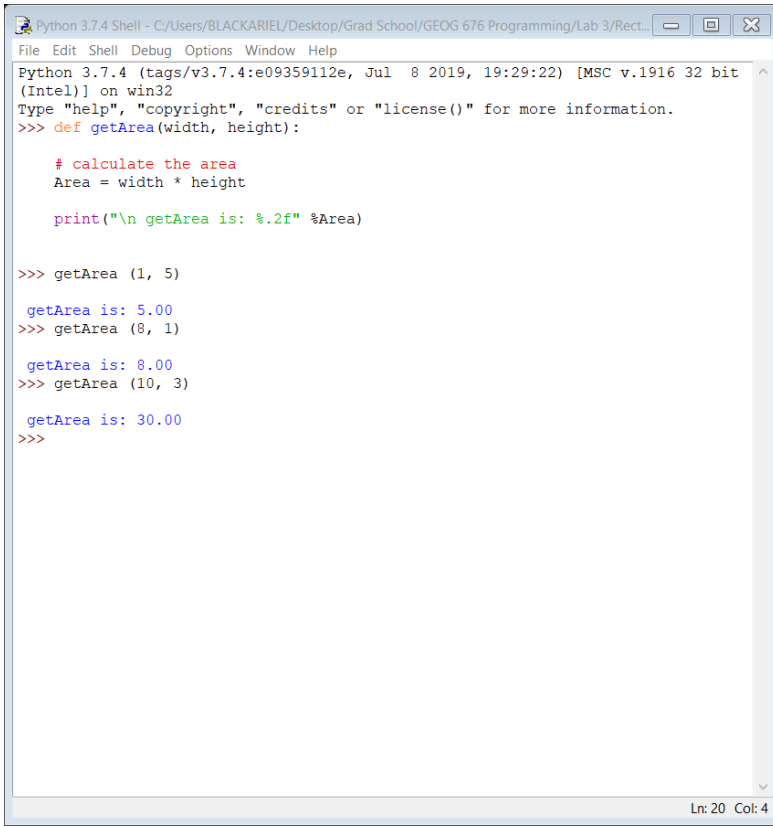
>>> class Triangle:
    def __init__(self, p1, p2):
        self.p1 = p1
        self.p2 = p2
    def getArea(self):
        return self.p1*self.p2*.5

>>>
```

Ln: 16 Col: 28

## Tasks 3 and 4:

### Rectangles Object and Printout



```
Python 3.7.4 Shell - C:/Users/BLACKARIEL/Desktop/Grad School/GEOG 676 Programming/Lab 3/Rect...
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> def getArea(width, height):

    # calculate the area
    Area = width * height

    print("\n getArea is: %.2f" %Area)

>>> getArea (1, 5)

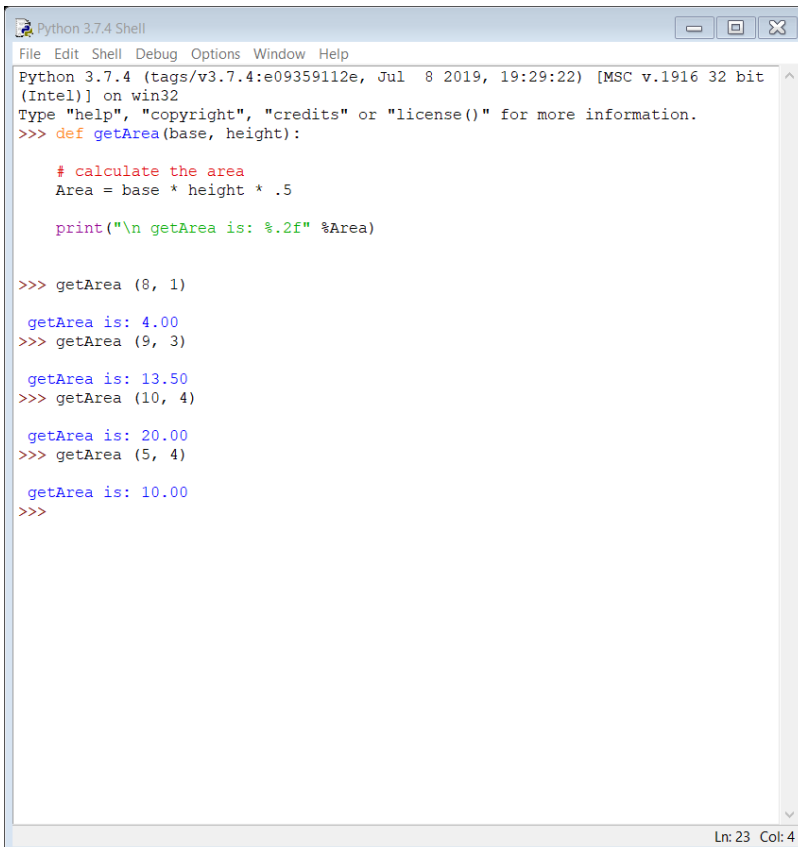
getArea is: 5.00
>>> getArea (8, 1)

getArea is: 8.00
>>> getArea (10, 3)

getArea is: 30.00
>>>
```

Ln: 20 Col: 4

### Triangles Object and Printout



```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> def getArea(base, height):

    # calculate the area
    Area = base * height * .5

    print("\n getArea is: %.2f" %Area)

>>> getArea (8, 1)

getArea is: 4.00
>>> getArea (9, 3)

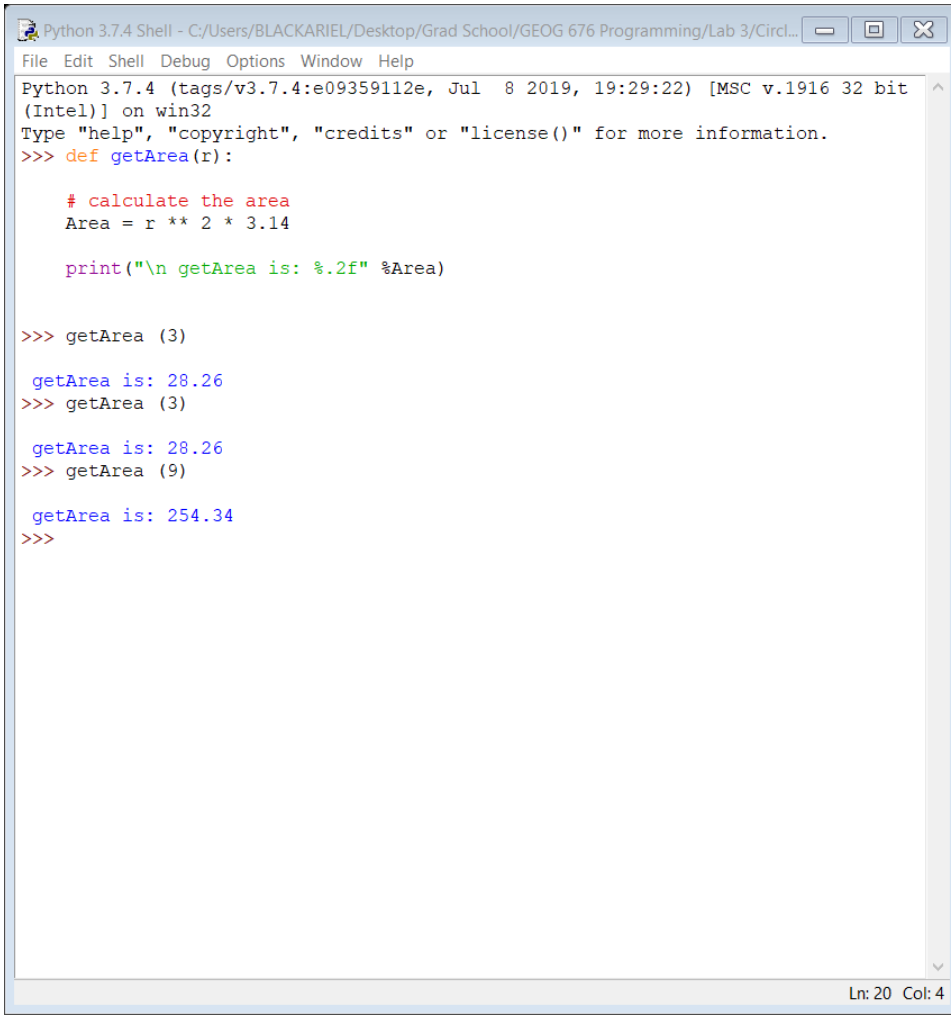
getArea is: 13.50
>>> getArea (10, 4)

getArea is: 20.00
>>> getArea (5, 4)

getArea is: 10.00
>>>
```

Ln: 23 Col: 4

## Circles Object and Printout



```
Python 3.7.4 Shell - C:/Users/BLACKARIEL/Desktop/Grad School/GEOG 676 Programming/Lab 3/Circl...
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> def getArea(r):

    # calculate the area
    Area = r ** 2 * 3.14

    print("\n getArea is: %.2f" %Area)

>>> getArea (3)

getArea is: 28.26
>>> getArea (3)

getArea is: 28.26
>>> getArea (9)

getArea is: 254.34
>>>
```

Ln: 20 Col: 4