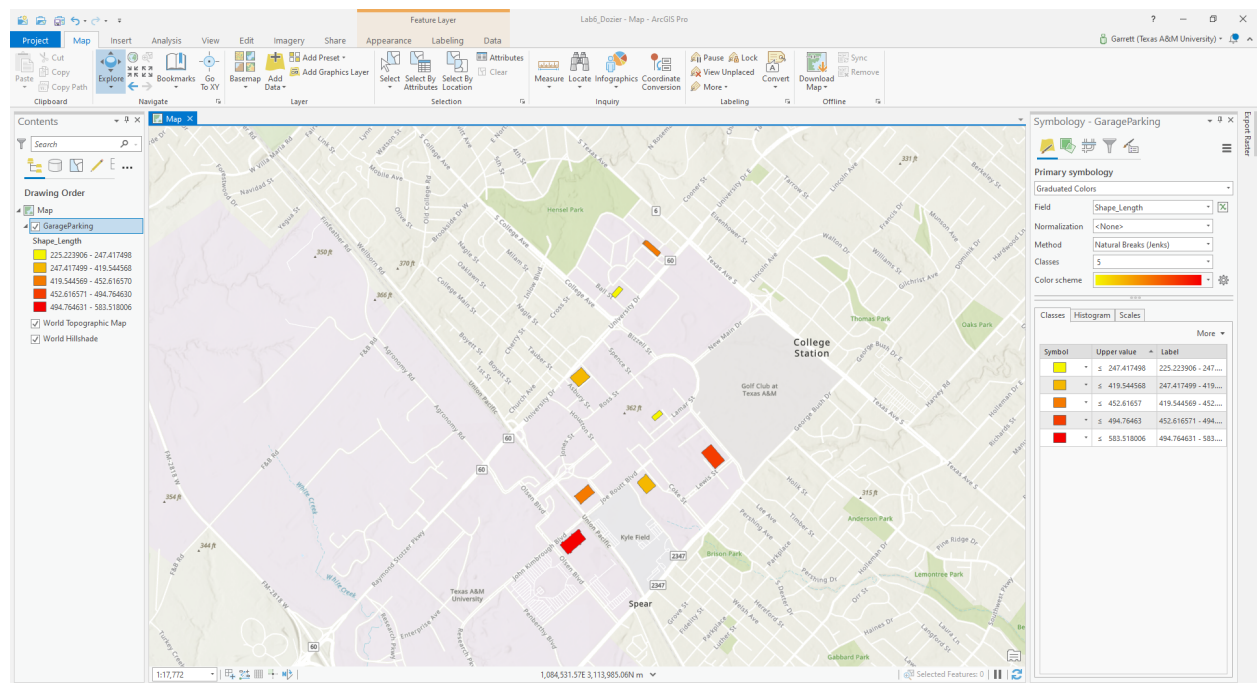


Screenshot of ArcGIS Pro:

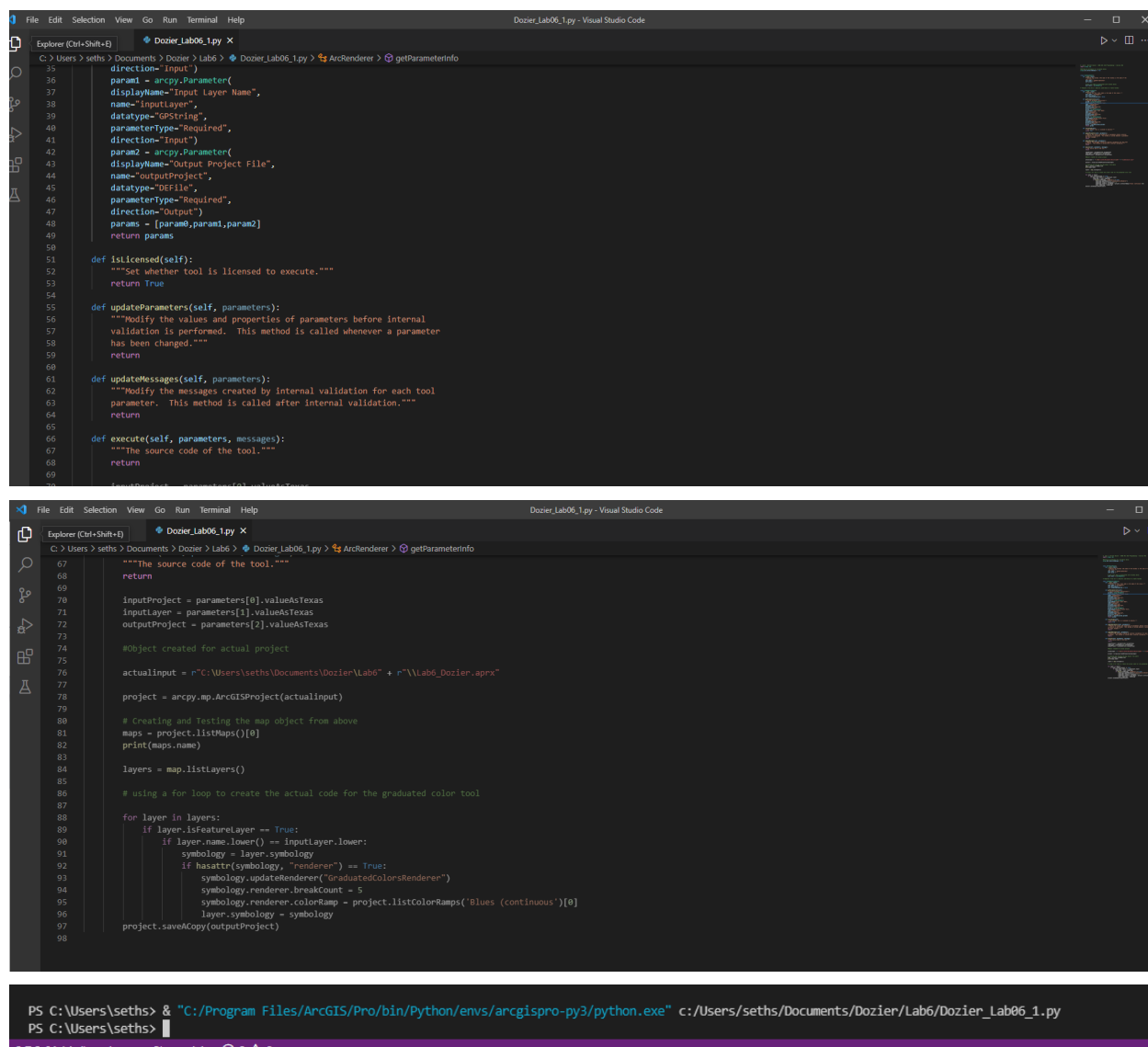


Screenshot of first try of code:

```
File Edit Selection View Go Run Terminal Help
Dozier_Lab06_1.py - Visual Studio Code

C:\Users> seth> Documents > Dozier > Lab6 > Dozier_Lab06_1.py > ArcRenderer > getParameterInfo
1 # Lab 6 - Garrett Dozier - GEOG 392 (GIS Programming) - Section 501
2 import arcpy, sys
3
4 #Setting up workspace for variables below
5 arcpy.env.overwriteOutput = True
6
7
8
9 class toolbox(object):
10     def __init__(self):
11         """Define the toolbox (the name of the toolbox is the name of the
12         .pyt file)."""
13         self.label = "RenderingToolbox"
14         self.alias = ""
15
16         # Tool list that is associated with toolbox below
17         self.tools = [ArcRenderer]
18
19 # Template (from Esri's website) used below to create toolbox
20
21 class ArcRenderer(object):
22     def __init__(self):
23         """Define the tool (tool name is the name of the class)."""
24         self.label = "ArcRenderer"
25         self.description = ""
26         self.canRunInBackground = False
27
28     def getParameterInfo(self):
29         """Define parameter definitions"""
30         param0 = arcpy.Parameter(
31             displayName="Input Project File",
32             name="InputProject",
33             datatype="DEFile",
34             parameterType="Required",
35             direction="Input")
```

Garrett Dozier - GEOG 392 - Section: 501 - LAB 6



```
File Edit Selection View Go Run Terminal Help
Dozier_Lab06_1.py - Visual Studio Code

Explorer (Ctrl+Shift+E)
C:\Users\seths> Documents > Dozier > Lab6 > Dozier_Lab06_1.py > ArcRenderer > getParameterInfo

35 direction= 'Input'
36 param1 = arcpy.Parameter(
37     displayName='Input Layer Name',
38     name='InputLayer',
39     datatype='GPString',
40     parameterType='Required',
41     direction='Input')
42 param2 = arcpy.Parameter(
43     displayName='Output Project File',
44     name='outputProject',
45     datatype='DEFile',
46     parameterType='Required',
47     direction='Output')
48 params = [param0,param1,param2]
49 return params
50
51 def isLicensed(self):
52     """Set whether tool is licensed to execute."""
53     return True
54
55 def updateParameters(self, parameters):
56     """Modify the values and properties of parameters before internal
57     validation is performed. This method is called whenever a parameter
58     has been changed."""
59     return
60
61 def updateMessages(self, parameters):
62     """Modify the messages created by internal validation for each tool
63     parameter. This method is called after internal validation."""
64     return
65
66 def execute(self, parameters, messages):
67     """The source code of the tool."""
68     return
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Garrett Dozier - GEOG 392 - Section: 501 - LAB 6

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File Edit Selection View Go Run Terminal Help
Dozier_Lab06_2.py - Visual Studio Code

Dozier_Lab06_2.py X
C:\Users\seths> Documents > Dozier > Lab6 > Dozier_Lab06_2.py > ArcRenderer > execute
1 # Lab 6 - Garrett Dozier - GEOG 392 (GIS Programming) - Section 501
2 import arcpy
3
4 #Setting up workspace for variables below
5 arcpy.env.overwriteOutput = True
6
7
8
9
10 class Toolbox(object):
11     def __init__(self):
12         """Define the toolbox (the name of the toolbox is the name of the
13         .pyt file)."""
14         self.label = "ArcRenderer"
15         self.alias = ""
16
17         # List of tool classes associated with this toolbox
18         self.tools = [ArcRenderer]
19
20
21 class ArcRenderer(object):
22     def __init__(self):
23         """Define the tool (tool name is the name of the class)."""
24         self.label = "ArcRenderer"
25         self.description = ""
26         self.canRunInBackground = False
27
28     def getParameterInfo(self):
29         """Define parameter definitions"""
30         param0 = arcpy.Parameter(
31             displayName="Input Project File",
32             name="inputProject",
33             datatype="DEFile",
34             parameterType="Required",
35             direction="Input")
36
37         param1 = arcpy.Parameter(
38             displayName="Output Project File",
39             name="outputProject",
40             datatype="DEFile",
41             parameterType="Required",
42             direction="Output")
43         params = [param0, param1, param2]
44         return params
45
46     def isLicensed(self):
47         """Set whether tool is licensed to execute."""
48         return True
49
50     def updateParameters(self, parameters):
51         """Modify the values and properties of parameters before internal
52         validation is performed. This method is called whenever a parameter
53         has been changed."""
54         return
55
56     def updateMessages(self, parameters):
57         """Modify the messages created by internal validation for each tool
58         parameter. This method is called after internal validation."""
59         return
60
61     def execute(self, parameters, messages):
62         """The source code of the tool."""
63         return
64
65         # Reference
66         project = arcpy.mp.ArcGISProject(r"C:\Users\seths\Documents\Dozier\Lab6" + r"\Lab6_Dozier.aprx")
67
68         campus = project.listMaps('Map')[0]
69         # Loop
70         for layer in campus.listLayers():
71             if layer.isFeatureLayer:
72                 symbology = layer.symbology
73                 if hasattr(symbology, 'renderer'):
74                     if layer.name == "GarageParking":
75                         symbology.updateRenderer('GraduatedColorsRenderer')
76                         symbology.renderer.breakCount = 5
77                         symbology.renderer.colorRamp = project.listColorRamps('Blues (5 Classes)')[0]
78                         layer.symbology = symbology
79                     else:
80                         # Return
81                         print("NOT GarageParking")
82
83         project.saveCopy(r"C:\Users\seths\Documents\Dozier\Lab6" + r"\Lab6_Dozier.aprx")
```

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File Edit Selection View Go Run Terminal Help
Dozier_Lab06_2.py - Visual Studio Code

Dozier_Lab06_2.py X
C:\Users\seths> Documents > Dozier > Lab6 > Dozier_Lab06_2.py > ArcRenderer > execute
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Dozier_Lab06_2.py - Visual Studio Code

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87         project.saveCopy(r"C:\Users\seths\Documents\Dozier\Lab6" + r"\Lab6_Dozier.aprx")
```

```
PS C:\Users\seths> & "C:/Program Files/ArcGIS/Pro/bin/Python/envs/arcgispro-py3/python.exe" c:/Users/seths/Documents/Dozier/Lab6/Dozier_Lab06_2.py
PS C:\Users\seths>
```

