**Chapter 9 – Questions**

Answer the following based on information from the chapter. Use the ArcGIS Help documentation to supplement the information contained in Chapter 9.

1. What are the series of programming steps that are required to access a specific layer from a map?
2. Name 4 types of Layout Elements used in an ArcMap.
3. What are the specific element names for the following that can be found in the **Map\_Template.mxd** document. The reader will likely need to open the map document and find the properties of the specific elements.
   1. Title
   2. Subtitle (where the specific neighborhood name will go)
   3. Author
   4. Date
   5. Legend
4. What kind of information is required to programmatically modify, export, or print map documents?
5. Describe what the following do and list two examples of each.
   1. Map Property
   2. Map Method
   3. Map Function
6. What Python routine is used to access a data frame?
7. What Python routine is used to access a layer?
8. What Python routine is used to access a layout element?
9. What Python routine is used to export a map to a PDF?
10. What Python routine is used to print a map to a local printer?
11. How can a map document that has been programmatically modified be saved?
12. What is the difference between save() and saveACopy() for the following:
    1. A Map document
    2. A layer file
13. What is the difference between the following?
    1. getExtent
    2. getSelectedExtent
    3. zoomToSelectedFeatures
14. What is the benefit of using a search cursor and this syntax for the query in the Exercise 9 script?

query = """"NAME" = '""" + NHName + """'"""

where NHName represents a variable for the name of a neighborhood

1. In the Exercise 9 script (once you are able to export PDF maps), why does the **Map\_Template.mxd** document NOT need to be saved?