Lab 0: Using ArcPy to Perform an Identical Buffer Fuction as a GUI

Introduction

The purpose of this Notebook is to perform the buffer tool on a Vector Shapefile to produce an identical output. First, I will set up the environment. Then, I will use python code to call and use the buffer too. The output will be "SNA_Buff_Arcpy". If it worked correctly, The results can be seen in Arc Pro GUI.

Environment Setup

The following cells will be used to import arcpy and setup the enviroment.

In [1]:
```
import arcpy #importing ArcPY
```

In [2]:
```
arcpy.env.workspace = 'D:/Users/Owner/Documents/ArcGIS/Projects/ROSEL_Lab0/ROSEL_Lab0.gdb' #Setting up enviroment to the geodatabase
```

Checking to see if it worked

In [3]:
```
featureclasses = arcpy.ListFeatureClasses() #if it worked, running the cell will return the featureclasses

featureclasses
```

Out[3]:
```
['SNABuff', 'scientific_and_natural_area_boundaries.shp', 'sna_parking.shp']
```

Running the Buffer Tool

This next cell will run the buffer tool. The input will be 'scientific_and_natural_area_boundaries.shp'. The output data will be "SNABuff_arcpy" and the buffer distance will be 5 miles.

In [5]:
```
arcpy.Buffer_analysis('scientific_and_natural_area_boundaries.shp', 'SNABuff_arcpy', '5 Miles') #input, Output, Buffer Distance, and all the rest are kept to the defaults.
```

Out[5]:

Output

D:/Users/Owner/Documents/ArcGIS/Projects/ROSEL_Lab0/ROSEL_Lab0.gdb\SNABuff_arcpy

Messages

Start Time: Monday, January 25, 2021 1:36:21 PM

Succeeded at Monday, January 25, 2021 1:36:21 PM (Elapsed Time: 0.79 seconds)

It worked, I can see "SNABuff_arcpy" on the computer and it looks exactly the same as "SNABuff". This concludes the notebook

In [ ]: