Census Tract Automation Instructions

By: Michael Ivison

**Purpose of program:** Python script that automates population of temperature normals for census tracts in a table. The script automates through each unique ID in the census tract layer, extracts the average temperature normal by overlaying a raster, adds a field in the census tract table representing the month, and populates the table.

**Note:** Successful run of script will require the proper workspace path on the user’s computer.

**Input parameters:**

1. Census Tract
   1. Created as variable *census\_tract*
2. Temperature data
   1. Created as a list variable *temp\_norm*

**Intermediate parameters:**

1. An empty list for temporary temperature data
   1. Created as a list variable *temp\_values*
2. A variable for MEAN temperature data that is created during the Extract by Mask tool
   1. Created as a variable *temp\_mean*
3. A variable to keep track of what month is being iterated through
   1. Created as a variable *count*

**Output parameters:**

1. An empty field that is created in the census tract layer using the Add Field tool
   1. Created as a variable *avgTemp*
   2. Assigned as type “FLOAT” using variable *avgTempType*