

```
# -*- coding: utf-8 -*-
# -----
# Project_GISProg_Code.py
# Created on: 2017-12-03 01:26:28.00000
# (generated by ArcGIS/ModelBuilder)
# Description:
# -----

# Set the necessary product code
# import arcinfo

# Import arcpy module
import arcpy

# Local variables:
Major_Roads_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Major_Roads.shp"
Fulton_Elementary_School_Zones_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Fulton_Elementary_Scho
Metro_Atlanta_Bicycle_Facility_Inventory_2014_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Metro_Atlanta_Bicycle_
Fulton_Elementary_School_Zones = "Fulton_Elementary_School_Zones"
Schools_Community_Facilities_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Schools_Community_Faci
Fulton_Elementary_School_Zones_shp_2_ =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Fulton_Elementary_Scho
Library_Community_Facilities = "Library_Community_Facilities"
Output_lib_near_school_dbf =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Output_lib_near_school
State_Highways_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\State_Highways.shp"
SH_near_shp_2_ =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\SH_near.shp"
Output_lib_near_school_Events = "Output_lib_near_school Events"
Lib_Near_Multi = "Lib_Near_Multi"
roadnear_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\roadnear.shp"
Bicyclenear_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Bicyclenear.shp"
School_Communitynear_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\School_Communitynear.s
Lib_near_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Lib_near.shp"
tableselectlib =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\tableselectlib"
SH_near_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\SH_near.shp"
SH_Near_Buffer_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\SH_Near_Buffer.shp"
School_SH_Clip_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\School_SH_Clip.shp"
Schools_1mi_SH_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Schools_1mi_SH.shp"
```

```
Lib_Near_Multi_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Lib_Near_Multi.shp"
Buffer_lib_final_shp =
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\Buffer_lib_final.shp"

# Process: Clip Analysis for major roadways for Fulton county
arcpy.Clip_analysis(Major_Roads_shp, Fulton_Elementary_School_Zones_shp, roadnear_shp, "")

# Process: Clip Analysis for Bicycle facilities for Fulton county
arcpy.Clip_analysis(Metro_Atlanta_Bicycle_Facility_Inventory_2014_shp,
Fulton_Elementary_School_Zones, Bicyclenear_shp, "")

# Process: Clip Analysis for Library facilities for Fulton county
arcpy.Clip_analysis(Library_Community_Facilities, Fulton_Elementary_School_Zones,
Lib_near_shp, "")

# Process: Clip Analysis for School Community facilities for Fulton county
arcpy.Clip_analysis(Schools_Community_Facilities_shp,
Fulton_Elementary_School_Zones_shp_2, School_Communitynear_shp, "")

# Process: Near Analysis for Libraries within 1mi of schools in Fulton county
arcpy.Near_analysis(Lib_near_shp,
"C:\\Users\\satye_000\\Desktop\\USA\\georgiatech\\GISPROG\\Project\\School_Communitynear.s
    "1 Miles", "NO_LOCATION", "NO_ANGLE", "PLANAR")

# Process: Table Select and create a dbf of Libraries in vicinity of School
arcpy.TableSelect_analysis(Output_lib_near_school_dbf, tableselectlib, "\"NEAR_DIST\" >
0")

# Process: Clip Analysis for State Highways for Fulton county
arcpy.Clip_analysis(State_Highways_shp, Fulton_Elementary_School_Zones, SH_near_shp, "")

# Process: Buffer Analysis for major roadways and State Highways in Fulton county with
value 0.25 mi
arcpy.Buffer_analysis(SH_near_shp_2, SH_Near_Buffer_shp, "0.25 Miles", "FULL", "ROUND",
"NONE", "", "PLANAR")

# Process: Clip Analysis for Schools within the major roadway and State highway buffer
for Fulton county
arcpy.Clip_analysis(School_Communitynear_shp, SH_Near_Buffer_shp, School_SH_Clip_shp, "")

# Process: Clip Analysis for Schools that were out of 1 mi radius from State Highway or
major roadways for Fulton county
arcpy.Clip_analysis(School_Communitynear_shp, School_SH_Clip_shp, Schools_1mi_SH_shp, "")

# Process: Multiple Ring Buffer around Library facility to identify schools in their
proximity
arcpy.MultipleRingBuffer_analysis(Output_lib_near_school_Events, Lib_Near_Multi_shp,
"2;3", "Miles", "distance", "ALL", "FULL")

# Process: Clip Analysis for Schools lying in a radius of 2 and 3 mi from Library
facility for Fulton county
arcpy.Clip_analysis(School_Communitynear_shp, Lib_Near_Multi, Buffer_lib_final_shp, "")
```