

PGEO6050 – Programming for Geospatial Database Applications

Laboratory 07 – Working with Geometry

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PART I: (30 points)

Write a Python script to

1. Generate randomly a set of 1,000 (one thousand) points with X and Y coordinates between 0 and 1,000.
2. Calculates the mean X and Y coordinates.
3. Identifies the points within plus and minus a user-defined delta distance from the means (defined as the selecting zone).
4. Generates a point ESRI Feature Class with these points and respective information to the attribute table of whether or not the points are within the selecting zone.
5. Generates a polygon ESRI Feature Class with a polygon rectangle of the selecting zone.
6. Create a ESRI GUI for your program.

SUBMISSION

Please submit your script as a PDF to D2L.