**Guided Project 2 –**

Google Earth Engine (GEE) is an expansive API resource for data, as well as a GIS workspace for geospatial analysis. GEE users can play the role of developer by using this platform for developing API apps or sharing code with other programmers for collaborative purposes. The problem is that many who are familiar with a graphic user interface (GUI) of conventional GIS software may be limited in using the data sources of GEE or relating these valuable data sources to their own collected data. Therefore, to solve this problem my main objectives were:

* 1. Use python code to read a .csv file and create a shapefile (shp) based on the data in the .csv
  2. Use python code to access the “USGS 3DEP 10m” elevation map and extract the elevation values from this map to be written to the points of the created shp file.
  3. Create a GUI tool that can execute the previous objectives based on a user’s entered parameters.

I began by making sure that all appropriate packages were installed for access to GEE. Anaconda prompt was used to install and authorize GEE in the same environment that my python libraries exist for in ArcGIS pro. I then created a jupyter notebook so that I could test small chunks of code and be sure that I had all the necessary packages installed. The coding elements that I tested for, and the cell outputs are as follows: