GIS applikationsutvecling 10 hp
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Assignment 2

This assignment is mandatory and will be graded with G/VG. You should submit your solution through Canvas no later than February 7. Prior to the coding, the queries can be tested in ArcGIS Pro (Select by Attribute, Select by Location) to visualize the expected results.

(G)

Write a Python function that will:

Given a path to a feature class H:/HomeFolder/Lab2/Lab2.gdb/Countries:

1) print out the number of features within the feature class, the geometry type, and the coordinate system name; Add code and print screen of the result.
2) print out the list of country names that are in the continent South America and have a population of over 20 million people; Add code and print screen of the result.
3) create a new feature class in the same geodatabase that will contain only countries that have a value of: “Developed region: G7” in the column ECONOMY. Add code and print screen of the result.
4) create a new csv file in the home folder with two headers, NAME, and GDP_MD_EST, which will contain the country name and the GDP value for all countries within the SUBREGION of Southern Asia. Add code and print screen of the result.
5) Create a Python toolbox that allows input of the country data and any other point data, e.g. airports and prints out a list of countries that touch the boundary of Austria using the select-by-location filter. (Study the list of all possible Spatial filters in this tool in ArcGIS Pro at this link: https://pro.arcgis.com/en/pro-app/latest/tool-reference/data-management/select-by-location-graphical-examples.htm). In addition, print out a list of all the entered points data within the countries around Austria. Add the code and the print screens of the results.

(VG)

6) Using the document added to the first lab, create a Python toolbox that will list all the wells that are located in the best-suited soil types polygons in one particular Swedish county. “Best-suited” soil type refers to soil where the wells do not dry out. Write some attribute information about these wells to a new CSV file.