GIS Engineering – Group Project Code Running Instructions

Group 1

Waterdragen 24[redacted]D

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Script execution steps

1. Unzip the files. Ensure that all python files and `HKDTM`, `Hong_Kong_18_Districts` folders are in the same folder level.
2. Open Anaconda Navigator and switch to the ArcGIS Pro environment with arcpy.
3. Open Terminal in Anaconda Navigator
4. Ensure that the Python version is at least 3.7. Run `` `python -V` `` to view the version.
5. Ensure that `geopy` has been installed. Run `` `pip install geopy` `` if you have not.
6. Run `` `cd C:/your/path/goes/here` `` to change the current working directory. Replace the path with the **actual directory** containing the python files.
7. Run `` `python question1.py` ``.
8. Run `` `python question2.py` ``.
9. Run `` `python question3.py` ``.
10. Run `` `python bonus1.py` ``.
11. Run `` `python bonus2.py` ``.
12. Note that `question1.py` must be run before all other files to instantiate the gdb folder and the necessary feature files.

Steps to import feature classes to ArcGIS Pro

1. Ensure that all Python files have been run.
2. Click Map > Add Data, double click the gdb file.
3. For question 1, select `All_Facilities_Density`, `Badminton_Court_Density`, `Basketball_Court_Density`, `Country_Parks_Density`, `Fitness_Center_Density`, `Parks_Gardens_Density`, `Sports_Grounds_Density`, and `Swimming_Pools_Density`.
4. For question 2, select `Badminton_Court_Walk_Intersect` and `Badminton_Court_User_Intersect`.
5. For question 3, select `ThreeTypeIntersect`.
6. For bonus question 1, select `Badminton_Courts_Near_PolyU`, `Basketball_Courts_Near_PolyU`, `Other_Recreation_Sports_Facilities_Near_PolyU`, `Swimming_Pools_Near_PolyU`.
7. For bonus question 2, select `FlatArea`.