

Support and Training in Geospatial Data Analysis and Sharing

1. Review of previous training material from November 30th - December 1st training via short quiz.
2. Introduction to Python (Bootcamp style)
 - a. What is Python
 - b. Define Interpreted language
 - c. Variables, data types
 - d. Conditionals; if, if-else, if-elif-else
 - e. For loop, while loop
 - f. Activity; write a program that solves a problem using data types, variables, conditionals
3. Reintroduction to the Digital Earth rooftop classification project
 - a. Working example (**Intro to Geopandas- see ..Next we are going to load the results of the Machine Learning model for Dominica's building footprint delineation and roof classification. This is contained in a geopackage.**)
 - b. Discussion
 - c. 02_building_classification.ipynb runs without error in Google Colab NOT Jupyter
4. Python
 - a. Functions
 - b. Activity; write 2 program that solves problems using functions
 - c. Classes
 - d. Activity; write 2 programs that solves problems using functions
5. Pandas, Geopandas
 - a. What are the Pandas and Geopandas libraries
 - i. Review with Notebooks from November 30th - December 1st 2023
 - b. Examples using pandas and Geopandas
 - i. Current Notebook
 - ii. Create Interactive Map:- **leafmap.Map**
 - iii. Convert csv to dataframe:- **leafmap.csv_to_df**
 - iv. Convert csv to geodataframe:- **leafmap.csv_to_gdf**
 - v. Add geodataframe to map:- **add_xy_data (leafmap.Map)**
 - c. Activities; realistic uses of Pandas and Geopandas functions