

Technical Test - Knowledge Management Officer

Total time: 4 hours

Python - Describe collections data

Statement: You're provided with a <u>CSV</u> file containing specimen collection data over several years. It has these columns:

Kingdom (string) - Species taxonomy
Family (string) - Species taxonomy
SciName (string) - Species taxonomy
Latitude (float)
Longitude (float)
CollectionCode (string) - Natural History Collection acronym
Origin (string) - Species origin status
Date (datetime) - Date of collection

Tasks:

- Load the data using pandas.
- For each collection (identified by CollectionCode), calculate taxonomic family proportion.
- Calculate the *species origin status* proportion.
- Visualize these results using Plotly, with proper labels and a title.
- Share the created code in a GitHub repo.

GIS - Visualize collections data

Statement: Using the software of your preference (QGIS, ArcGIS, etc) with the previous CSV file and the provided shapefile.

Tasks:

- Create a map of the collected specimens. Represent each collection with a different symbol.
- Provide an image (PNG or JPG) of the final product as well as the project files.