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- Worked through https://www.qgistutorials.com/sl/docs/getting_started_with_pyqgis.html, which had issues. Realized it was for a previous version of python, and that now in python 3, some things have changed that are reflected in the updated tutorial here https://www.qgistutorials.com/sl/docs/3/getting_started_with_pyqgis.html
- Now adding pandas to try to manipulate the data further. As a fairly arbitrary task, I want to make a new vector layer that has all the airports within 10 degrees of the equator. This could be done in excel by exporting the attribute table, but that's no fun.
- Tutorial (getting started with pyqgis) exports a txt file. I want it in pandas in python. I uploaded as a text file using "csv", and it appears to have worked, getting rid of spaces associated with commas
- Wasn't able to access column names after the first column "name". Realized that the CSV was leaving in the space I'd included when I created the header. So the spaces between name, iata code, lat, and long for airport data entry rows is filtered by the "read CSV" pandas function, but the spaces in the name header aren't filtered out. Deleting the spaces in the header creation resolved the issue. Spent a while troubleshooting this, going through various test cases to see what would and wouldn't work to isolate the issue.
- Trying to upload CSV output as a new layer, code started failing, each attempt creating an empty layer with no data.
 - Looked at csv and txt outputs, both had only the header, no airport data. Realized that first line of code from the Tutorial set the active layer as the selected QGIS layer. So after the first failed empty layer was created and selected as the new active layer, subsequent attempts based on this empty active layer couldn't create the txt and csv files I wanted. Now figuring out how to import the .shp file directly into PyQGIS
 - Figured out how to load shp file to create a new layer
 - Although, I already have the shp file loaded most of the time, just have to be sure it's selected, not the newer files, got that info from https://docs.qgis.org/3.28/en/docs/pyqgis_developer_cookbook/cheat_sheet.html#canvas
 - Now by selecting the desired layer each time, rather than relying on having the desired layer selected in QGIS, my csv file contains the desired name, iata code, lat, and long each time
- Even after fixing that, my upload still yields an empty layer
 - Fix to empty layer was specifying the whole file path the the CSV file. Don't really understand this since the QGIS project is in the same folder as the csv file