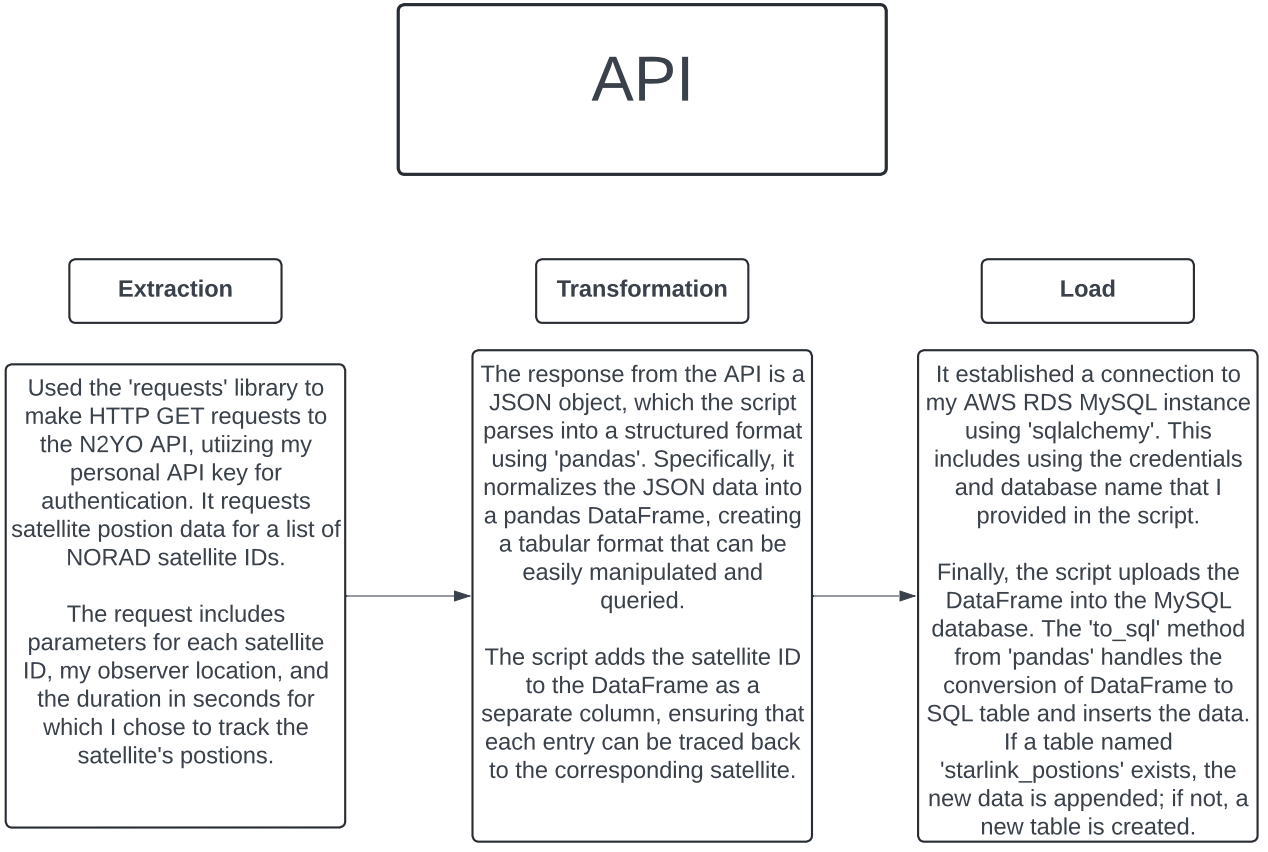
API
Extraction
Used the 'requests' library to make HTTP GET requests to the N2YO API, utiizing my personal API key for authentication. It requests satellite postion data for a list of NORAD satellite IDs.
The request includes parameters for each satellite ID, my observer location, and the duration in seconds for which I chose to track the satellite's postions.
Transformation
The response from the API is a JSON object, which the script parses into a structured format using 'pandas'. Specifically, it normalizes the JSON data into a pandas DataFrame, creating a tabular format that can be easily manipulated and queried.
The script adds the satellite ID to the DataFrame as a separate column, ensuring that each entry can be traced back to the corresponding satellite.
Load
It established a connection to my AWS RDS MySQL instance using 'sqlalchemy'. This includes using the credentials and database name that I provided in the script.
Finally, the script uploads the DataFrame into the MySQL database. The 'to_sql' method from 'pandas' handles the conversion of DataFrame to SQL table and inserts the data. If a table named 'starlink_postions' exists, the new data is appended; if not, a new table is created.