**Electric Vehicle Data Analysis**

This Python script analyzes data from electric vehicles (EVs) to extract key metrics such as energy consumption, distance traveled, and mode of operation. It includes functions to plot graphs of battery and motor data, calculate energy-related metrics, and generate a PowerPoint presentation summarizing the analysis results.

**Setup and Requirements**

1. **Python**: Make sure you have Python installed on your system. The script is compatible with Python 3.
2. **Dependencies**: Install the required Python packages using pip:

Libraries to be installed: **pip install pandas matplotlib mplcursors Pillow python-pptx**

1. **Data Files**: Ensure that your data files (CSV format) are organized in subfolders within a main folder. Each subfolder should contain a log file (**log.csv**) and a kilometer file (**km.csv**) for analysis.

**Usage:**

1. **Run the Script**: Execute the main script (**CodeForAutomation.py**) using Python. The script will iterate over the subfolders in the main folder, analyze the data files, and generate a PowerPoint presentation with the analysis results.
2. **View Results**: The script will generate a PowerPoint presentation (**analysis\_results.pptx**) in each subfolder, summarizing the analysis results for that particular set of data files.
3. **Customization**: You can customize the script to modify the analysis or presentation generation process according to your specific requirements.

**April 4,2024**

1. **Added Code for Max and min cell temperature (which was previously “nan”.**
2. **Changed the SOC analysis (which Adarsh’ code gave wrong values because of calculation with “actual\_Ah”).**
3. **Folder iteration done(accessing the csv files and saving the ppt and excel)**

**To change:**

1. **Alignment of the ppt- not done**
2. **Combine (append the columns in excel file)- not done**
3. **Change the graph path - DONE**