**NOTICE:** The Program is straightforward; all you need to do is to run *PassProofInstaller*, *install it into your computer* and use it right away. This instruction pdf is for explaining what each folder contains and what the purpose is and to make you "feel" the workload.

You need to have libraries installed on your system, specifically json, math, re, and tkinter, all of them should already be installed on your system. We however, need to install customkinter and pandas, run these commands in the terminal to install them:

## pip install pandas

## pip install customtkinter

We have 2 folders, one for data cleaning and preprocessing and the other one for analyzing the dataset.

You first need to open the *Data* folder and run the script to get the cleaned\_data file. The file is output as a result when running the cleaned\_data python script. The files are all there before so that you know what kind of output each script gives.

In the *Analyze* folder, make sure each file is there; if not, the final script won't run smoothly. In the Analyze folder we have:

*config file:* It's a wordlist; the file must be in the same folder as the other files if you're going to test the workload.

*cleaned\_dataset:* It's a csv file, and it's just like the original dataset, just a cleaner and more preprocessed dataset. It's now used as our source to find the result. It must be in the same folder as the other files; this is the cleaned dataset after you run the preprocessing script.

analyze\_data: this is the file you run first in this folder; this will output Results (JSON FILE), which is our results from the cleaned dataset

*password\_checker:* this is the final file you ran last; this will give you the final product just like PassProof.exe.

Follow these steps like we did when we created all the scripts:

- 1. Go to **cleaned folder** and run the **cleaned data** Python script.
- 2. copy and paste the output **cleaned\_dataset** to the analyze folder.
- 3. Go to **Analyze folder**, you should leave the config file. It's very important since it contains the wordlist we created.
- 4. Run the **Analyze\_data**, you will get a new json file called Results. You need to let the json file be within the **password checker** script since we need it to compare it to password inputs.
- 5. Run the **password checker** script lastly and your done.