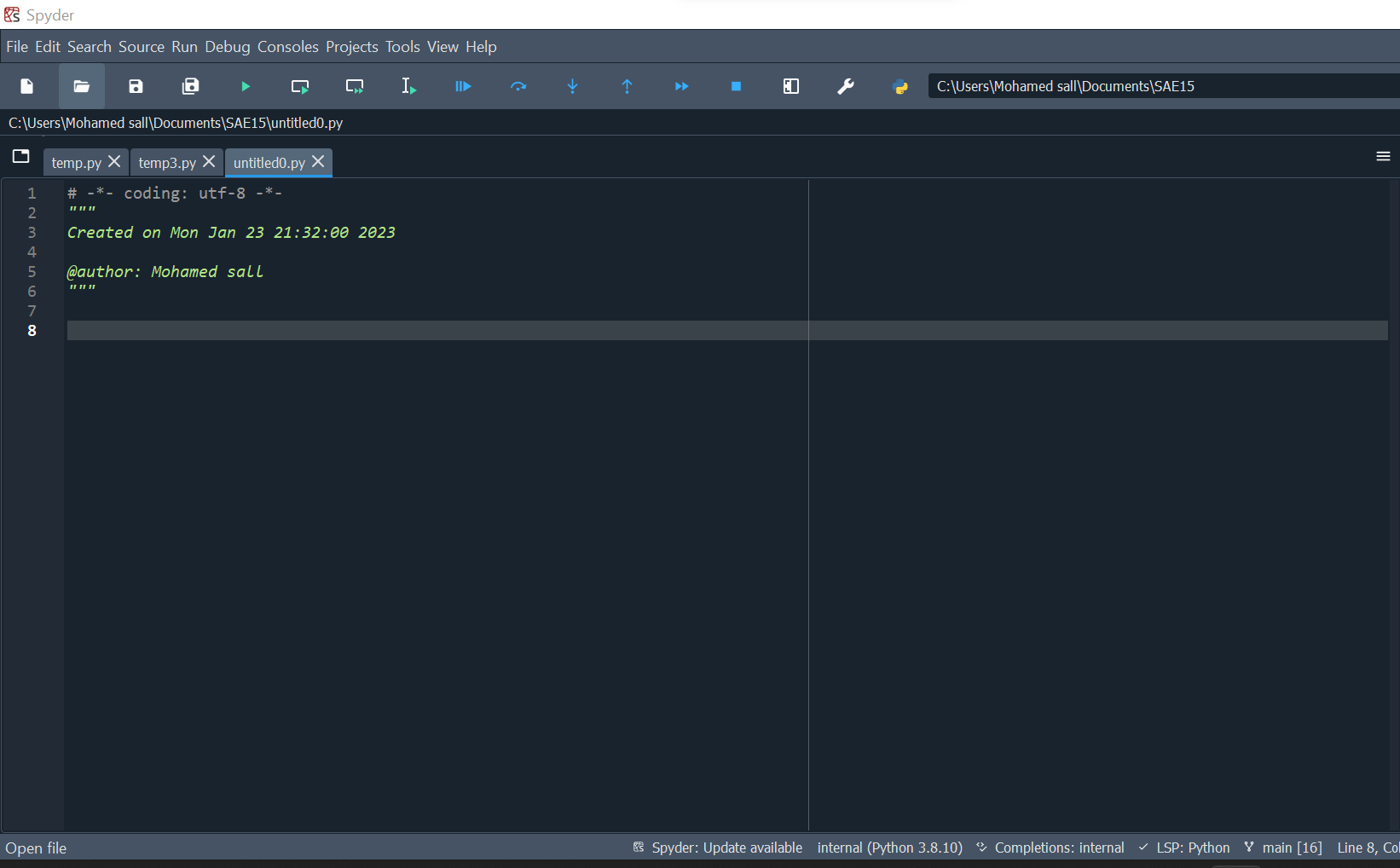
**Name :Mohamed Sall Group :A1**

**SAE1.05 :Traitement de données**

**Instructions for use program :**

This notice will allow us to better use the python program.

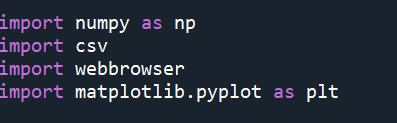
You have to install a suitable environment for the python language for example Spyder .



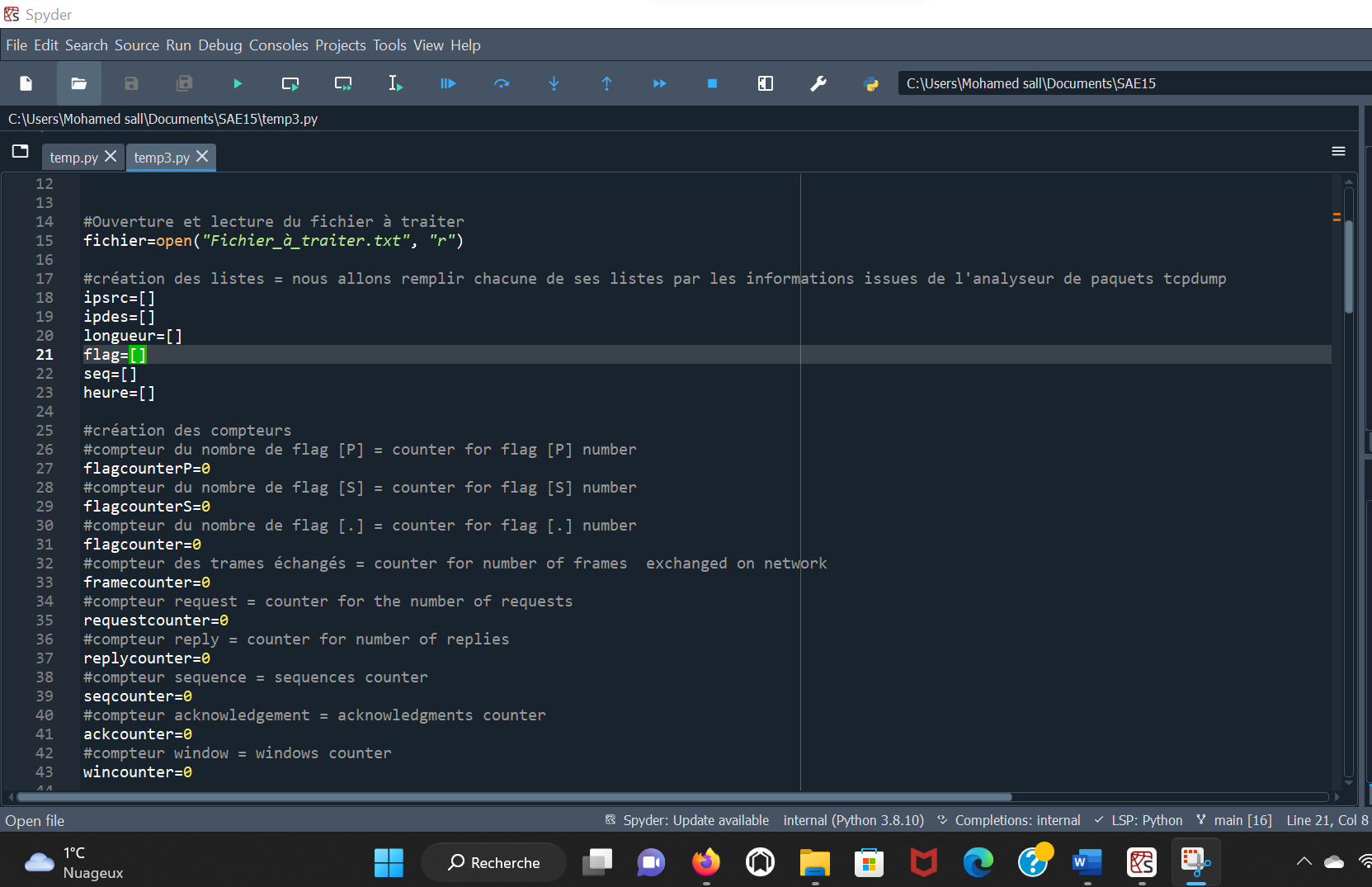
**Detailed explanation of the code :**

-Here we have imported the necessary libraries to process data with Excel and to represent them with a graph under python without forgetting the display on web page.

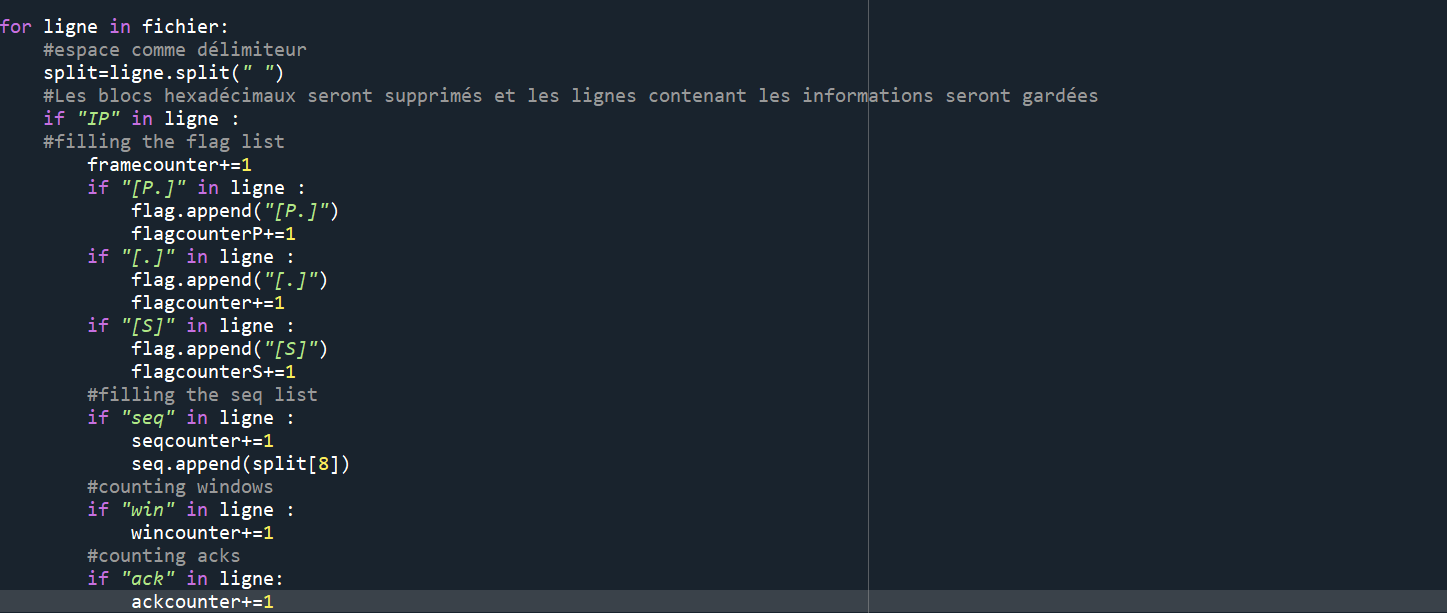
Import webbrowser for the web page/ import matplotlib.pyplot as plt for the graphs in Python/Import csv for transformation to csv file/Import numpy as np for tables or counters…

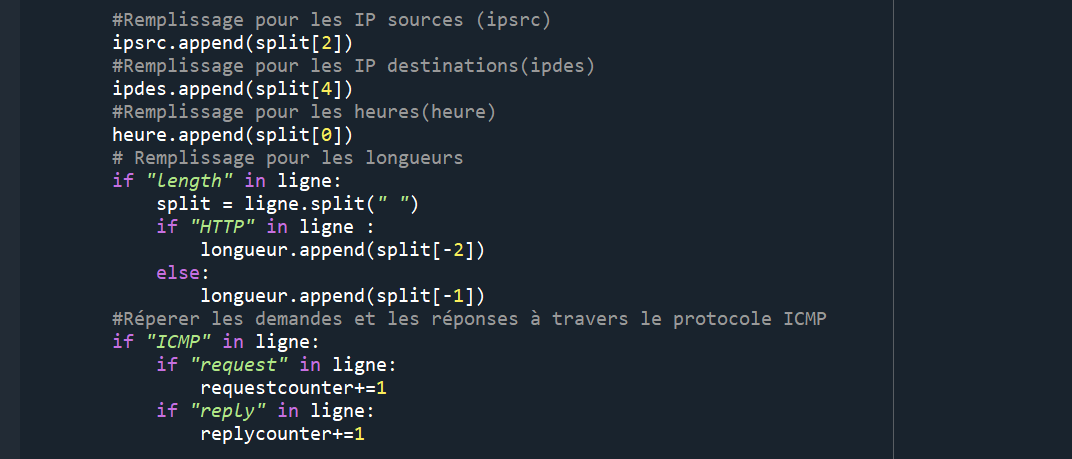
****

-We have here a piece of code that allows to open a file . In addition , it create lists and counters on the information coming from the tcpdump command(ipsrc,ipdest,seq….) .

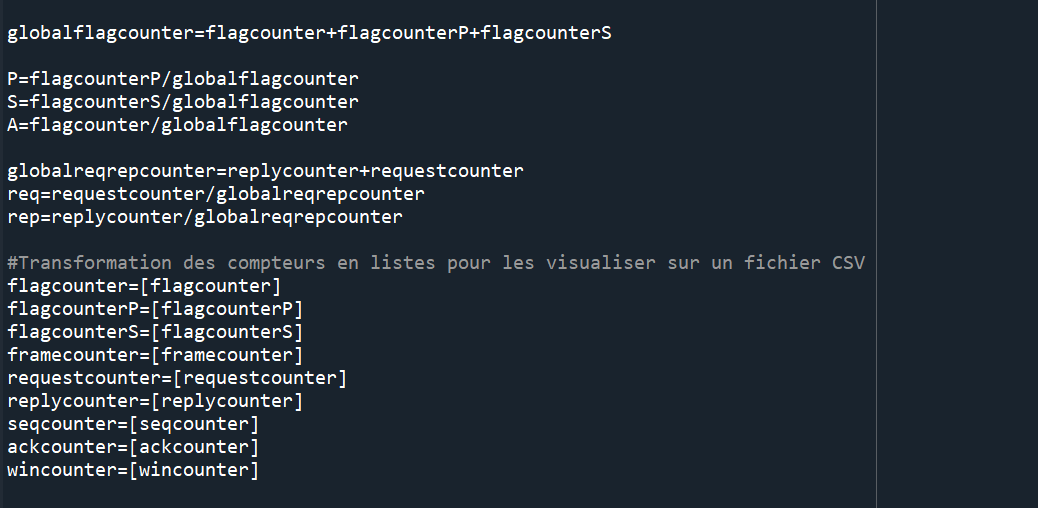


-This code show the filling of each list . However , we put a delimiter and the condition of filling depends on information. We can see the difference.

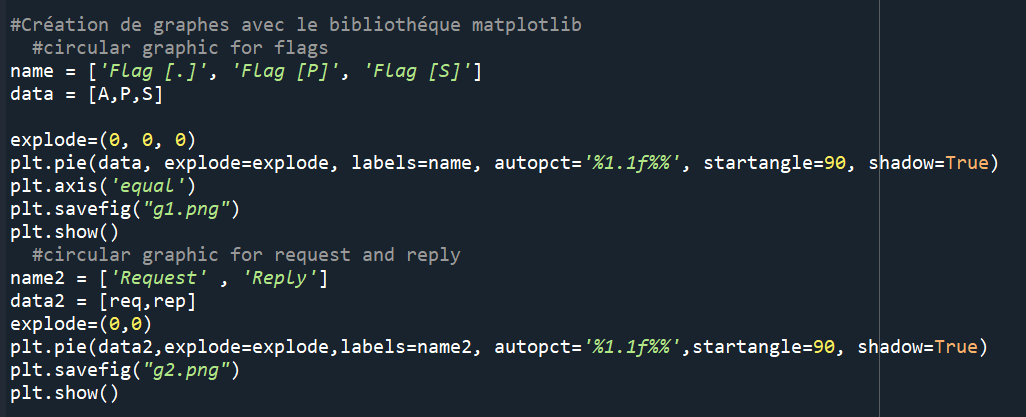


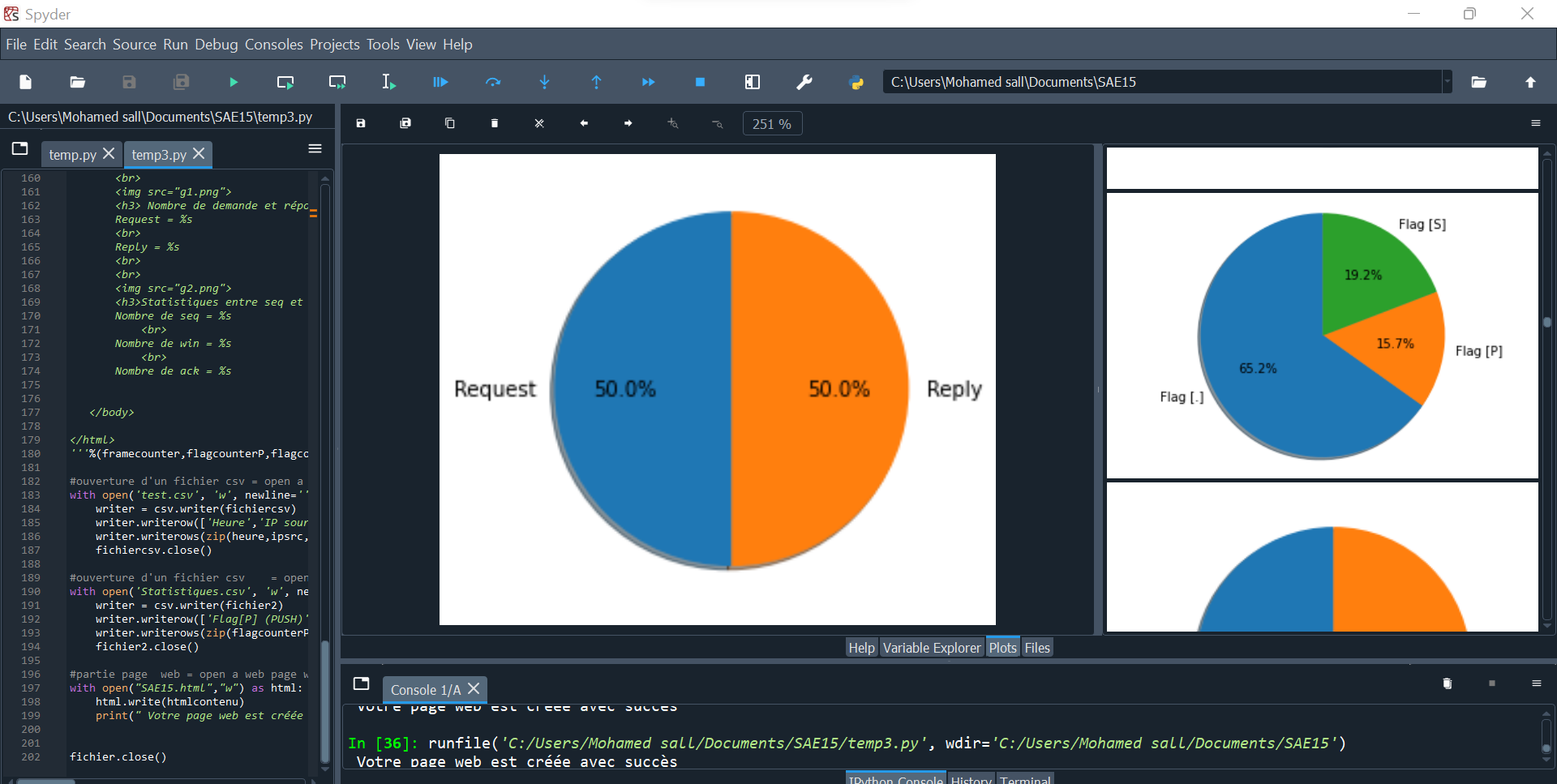


-This part of the code illustrates the transformation of counters into lists to view them on a csv file that we will open with excel.

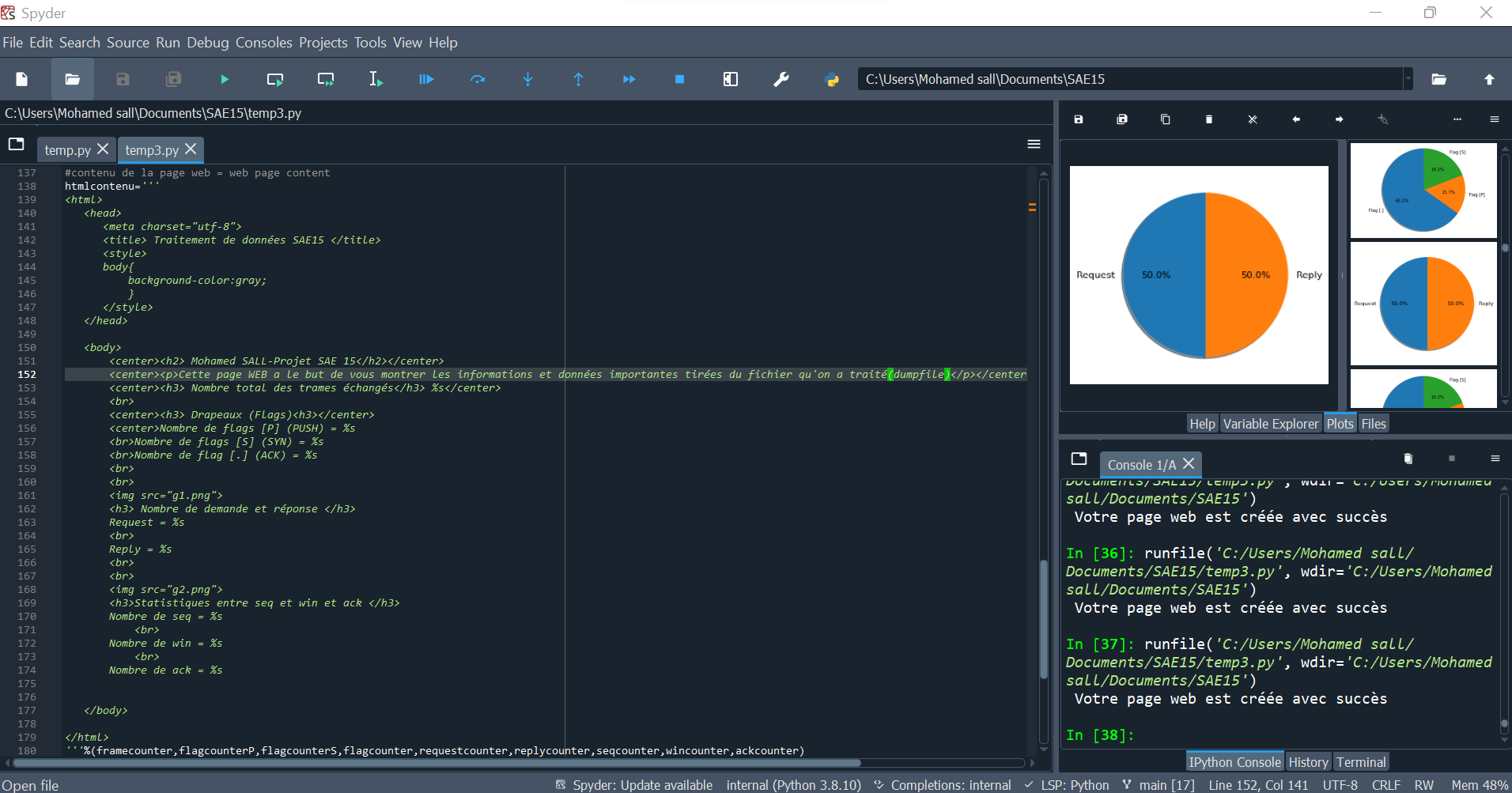


- This part shows the code that generates circular graphs in python and saves them.

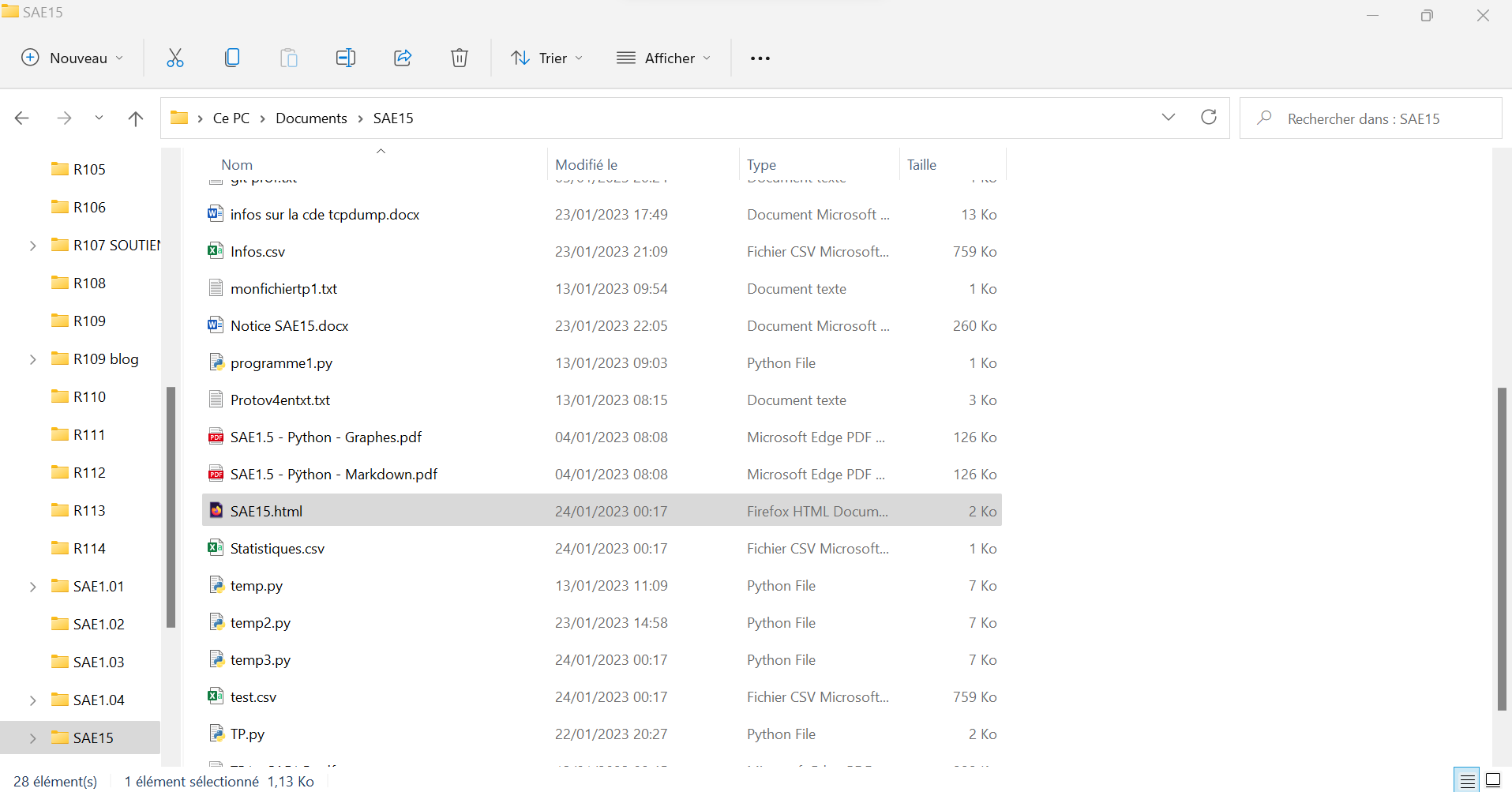


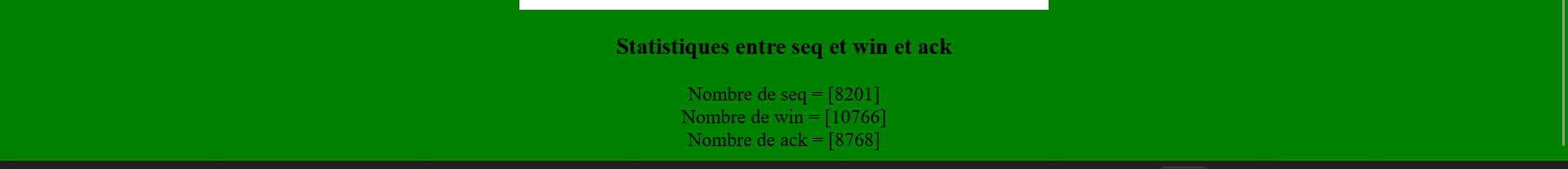
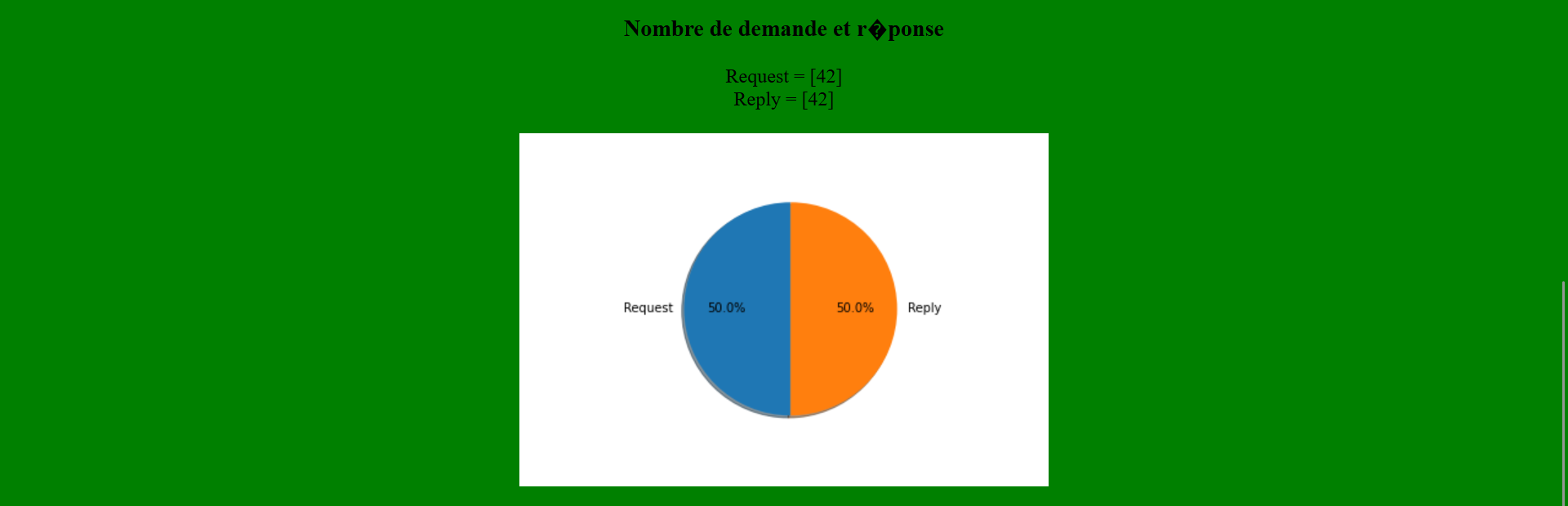
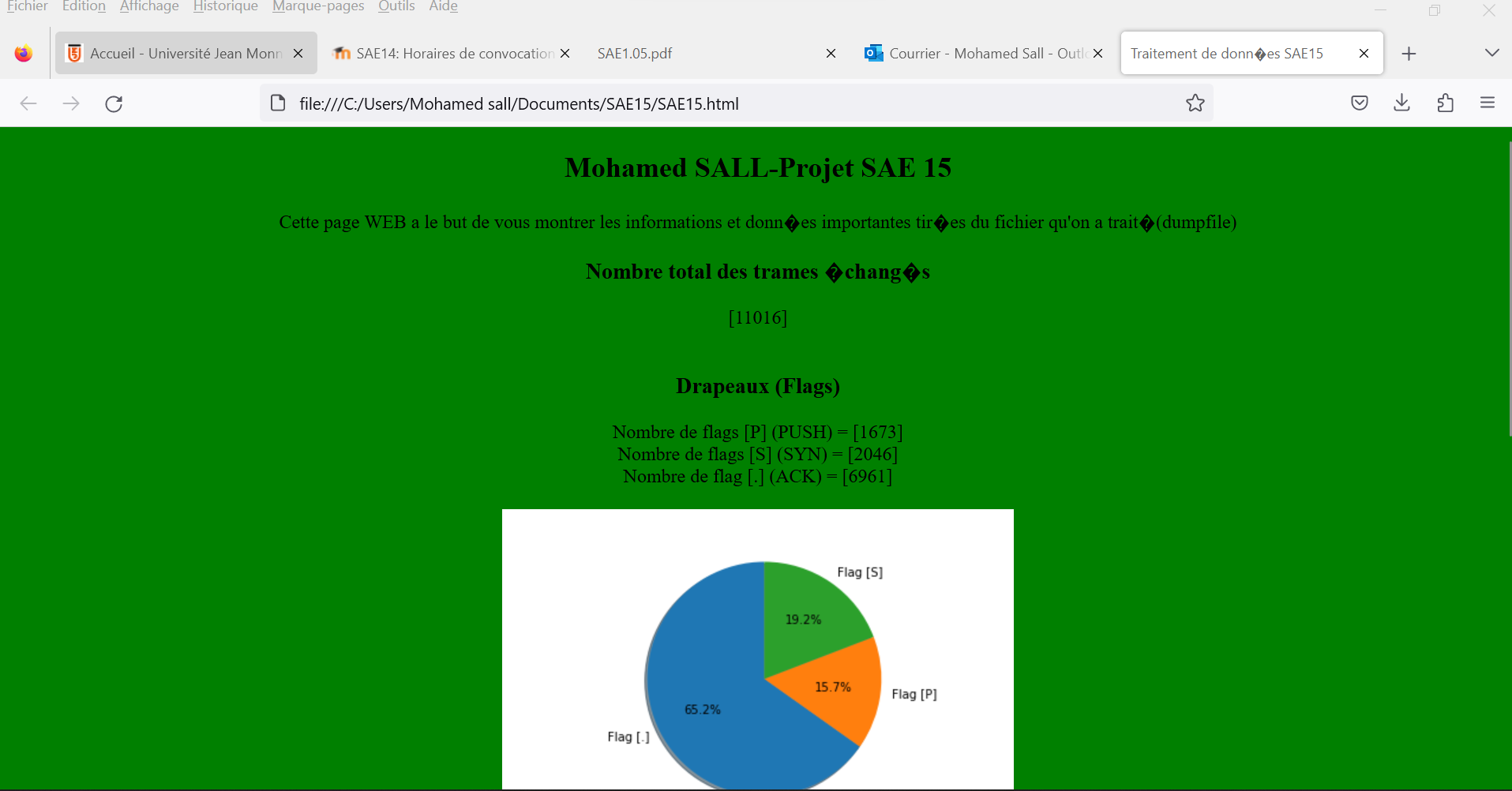


-This is the web page code. We have created this page to represent the results obtained by integrating the graphs (g1.png & g2.png) .



Here is the web page :



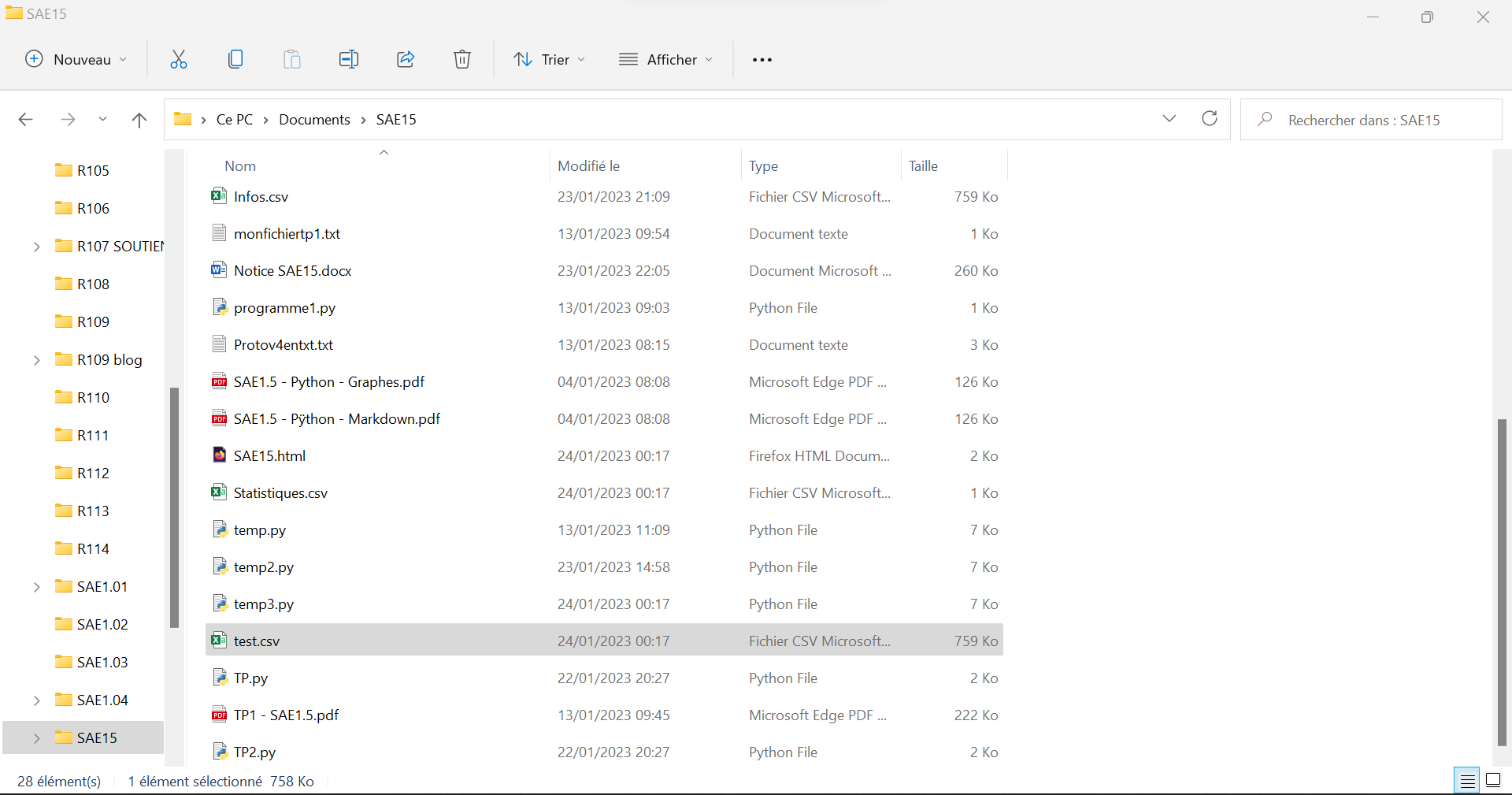


-This piece of code create two csv files . The most important is test because it give all the important information coming from tcpdump command

Une image contenant texte

Description générée automatiquement

Normally, the program will be generate in our folder SAE15 :



This file will be open by excel with the information

