User manual Python code and Excel file | Alexis Barou| SAE 15 | RT1 A1

1. Opening and editing the Python program

To open the program, you need to install ***Spyder*** or Visual ***Studio Code*** on your computer.

And make some changes before launching the program:

- Change the path where the ".txt" file to be processed is located (This line indicates the opening of the file).

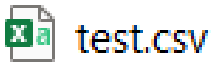
```
import numpy as np
import datetime
import os
import csv
import typing

try:
    with open("D:/Clé USB (MAJ 17-01-22)/SAE 15/SAE 15/testfichier.txt", encoding="utf8") as fh:
        res=fh.read()
```

- Change the path where the ".csv" file is located, in which the results of the program will be displayed and stored in an ***Excel*** table.

```
tableau_evenements=np.array([])
prog=1 #variable pour faire fonctionner la boucle
fic=open("D:/Clé USB (MAJ 17-01-22)/SAE 15/SAE 15/test.csv", "w")
characters = ":" #définir une variable avec le caractère ":" (qui r
while prog == 1 :
```

If your ".csv" file does not exist, it will still be created in the location indicated in your program (with the name "test.csv").



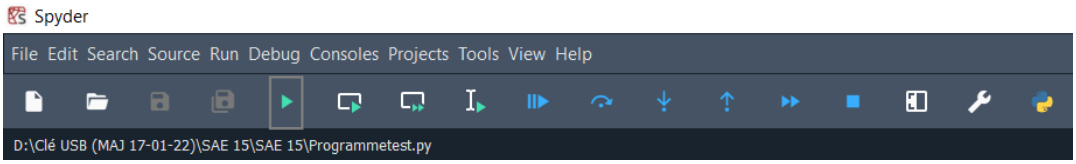
- Change the content "event.startswith" if you want to process another document (by the beginning of your last line of your file)

```
len(texte) > 2:
 if texte[3].startswith(" length"): #Si ça c
     length1=texte[3].split(" ") #on coupe à
     length=length1[2] ##On veut bien le "2"
     length = length.replace(characters,"")#
event.startswith("11:42:05.769075") : #dès q
 prog=0 #il ne fait plus de tour, il s'arret
```

We can move on to the next step

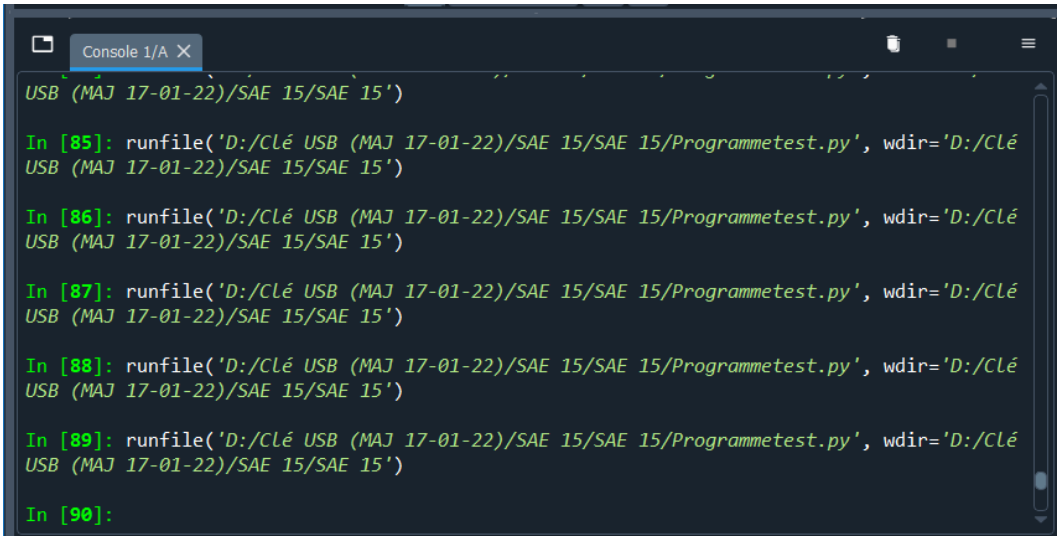
2. Launch of the program

To run the program, you need to press the button  2 times in a row



The part at the bottom right of the screen shows you if you have a problem with your file Python.

If you have no errors, the console will write "runfile...» in green (see photo below)



3. Result on Excel

Open the ".csv" file that contains the results:

	A	B	C	D	E	F	G	H	I
1	DATE	SOURCE	DESTINATION	FLAG	SEQ	ACK	WIN	OPTIONS	LENGTH
2	11:42:04.766	BP-Linux8.ssh	192.168.190.1	P.	2243505564:2	1972915080	312	nop,nop,TS va	108
3	11:42:04.766	BP-Linux8.ssh	192.168.190.1	P.	108:144	1	312	nop,nop,TS va	36
4	11:42:04.767	BP-Linux8.ssh	192.168.190.1	P.	144:252	1	312	nop,nop,TS va	108
5	11:42:04.767	BP-Linux8.ssh	192.168.190.1	P.	252:288	1	312	nop,nop,TS va	36
6	11:42:04.785	192.168.190.1	BP-Linux8.ssh	.		108	7319	nop,nop,TS va	0
7	11:42:04.785	192.168.190.1	BP-Linux8.ssh	.		144	7318	nop,nop,TS va	0
8	11:42:04.785	192.168.190.1	BP-Linux8.ssh	.		252	7316	nop,nop,TS va	0
9	11:42:04.785	192.168.190.1	BP-Linux8.ssh	.		288	7320	nop,nop,TS va	0
10	11:42:05.768	BP-Linux8.584	ns1.lan.rt.domain:						
11	11:42:05.769	ns1.lan.rt.don	BP-Linux8.58466:						
12	11:42:06.681	190-0-175-10	184.107.43.74	S	556803824:556803944		512		120

The variables are displayed in the spreadsheet. Semicolons are there to separate with columns

```
evenement=heure1+";"+nomip1+ ";"+ nomip2+ ";"+flag+ ";" +seq+ ";" +ack+ ";" +win+ ";" +options+ ";" +length
```

To add the headings for each column:

```
prog=1 #variable pour faire fonctionner la boucle
fic=open("C:/Users/alexi/Desktop/SAE 15/test.csv", "w")
evenement = "DATE ; SOURCE ; PORT ; DESTINATION ; FLAG ; SEQ ; ACK ; WIN ; OPTIONS ; LENGTH"
fic.write(evenement + "\n") #écriture de mes titres dans le tableur
```