

# Group A

## ASSIGNMENT NO. 8

### Aim: Data Visualization I :

- i) Use the inbuilt dataset 'titanic'. The dataset contains 891 rows and contains information about the passengers who boarded the unfortunate Titanic ship. Use seaborn library to see if we can find any patterns in the data.
- ii) Write a code to check how the price of the ticket (column name: 'fare') by each passenger is distributed by plotting a histogram.

Sol<sup>n</sup> :

### OUTPUT :

The screenshot shows a Jupyter Notebook interface on a Windows desktop. The notebook has three cells:

- Cell [5]:

```
import pandas as pd
import numpy as np

import matplotlib.pyplot as plt
import seaborn as sns
```
- Cell [6]:

```
df=pd.read_csv("../input/titanic-extended/full.csv")
```
- Cell [7]:

```
df.head()
```

Output:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Embarked	Wikitid	Name_wiki	Age_wiki	Hometown	Boarded	Destin
0	1	0.0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	72.500	...	5	Braund, Mr. Owen Harris	22.0	Brigdale, Devon, England	Southampton	Saskatch

The right sidebar shows the input data files: titanic-extended (full.csv, test.csv, train.csv). The output section shows a folder /kaggle/working. There are also settings and code help sections.

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Code

[7]: df.head()

	Pclass	Survived	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Embarked	Wikid	Name_wiki	Age_wiki	Hometown	Boarded	Destin
0	1	0.0	Brund... Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	...	S	Braund, Mr. Owen Harris	22.0	Bridge... Devon, England	Southampton	Qu'A Saskatch...
1	2	1.0	Cumings, Mrs. John Bradley (Florence Briggs Th...)	female	38.0	1	0	PC 17599	71.2833	...	C	Cumings, Mrs. Florence Briggs (née Thayer)	35.0	New York, US	Cherbourg	New Y...
2	3	1.0	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	...	S	Heikkinen, Miss Laina	26.0	Jyväskylä, Finland	Southampton	New Yo...
3	4	1.0	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	...	S	Futrelle, Mrs. Lily May (née Peel)	35.0	Scituate, Massachusetts,	Southampton	Massach...
4	5	0.0	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	...	S	Allen, Mr. William Henry	35.0	Birmingham, West Midlands, England	Southampton	New Yo...

5 rows × 21 columns

Console

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## The Dist Plot:

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Code

[14]: sns.distplot(df['Fare'])

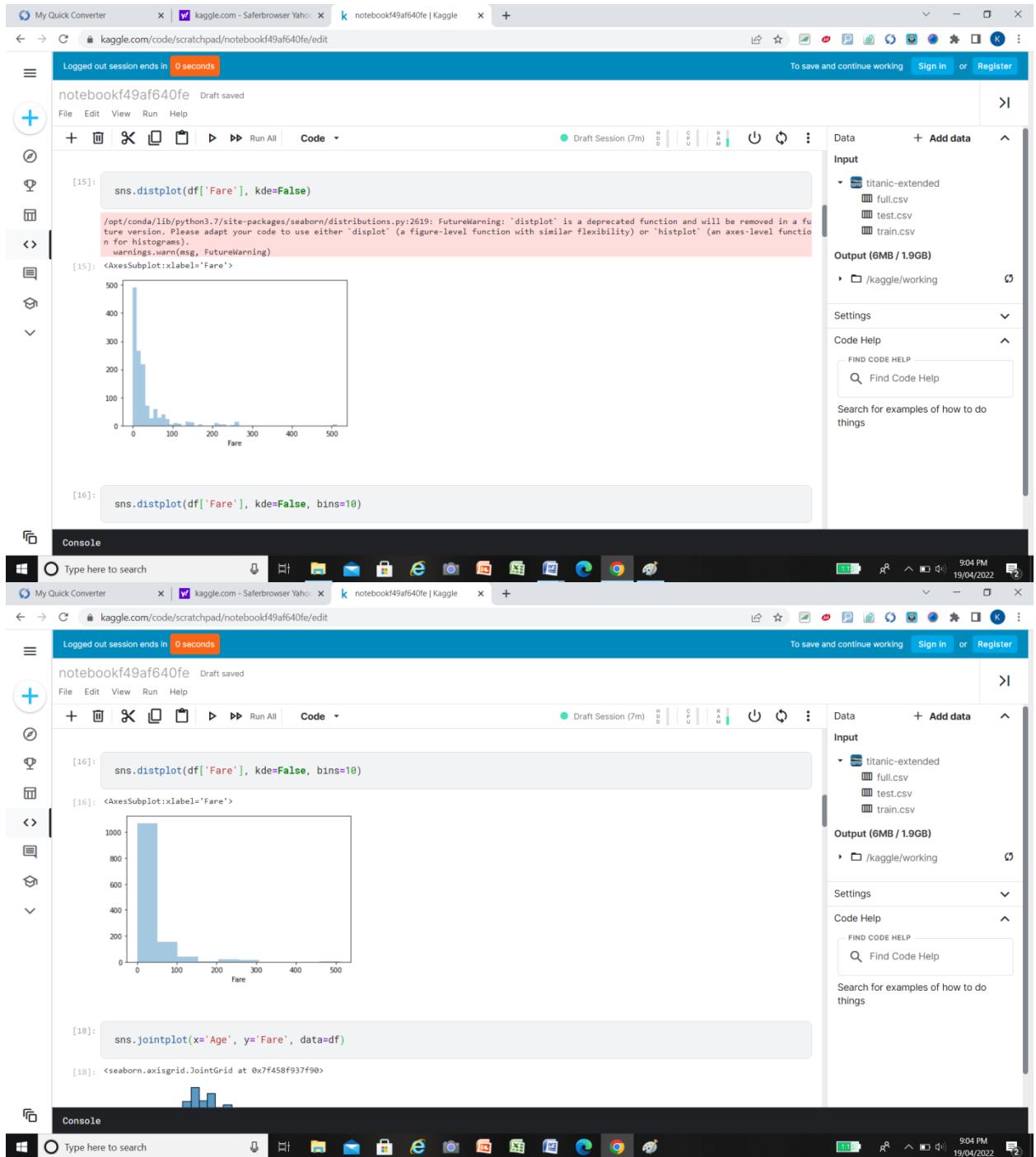
```
/opt/conda/lib/python3.7/site-packages/seaborn/distributions.py:2619: FutureWarning: 'distplot' is a deprecated function and will be removed in a future version. Please adapt your code to use either 'displot' (a figure-level function with similar flexibility) or 'histplot' (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

[14]: <AxesSubplot:xlabel='Fare', ylabel='Density'>

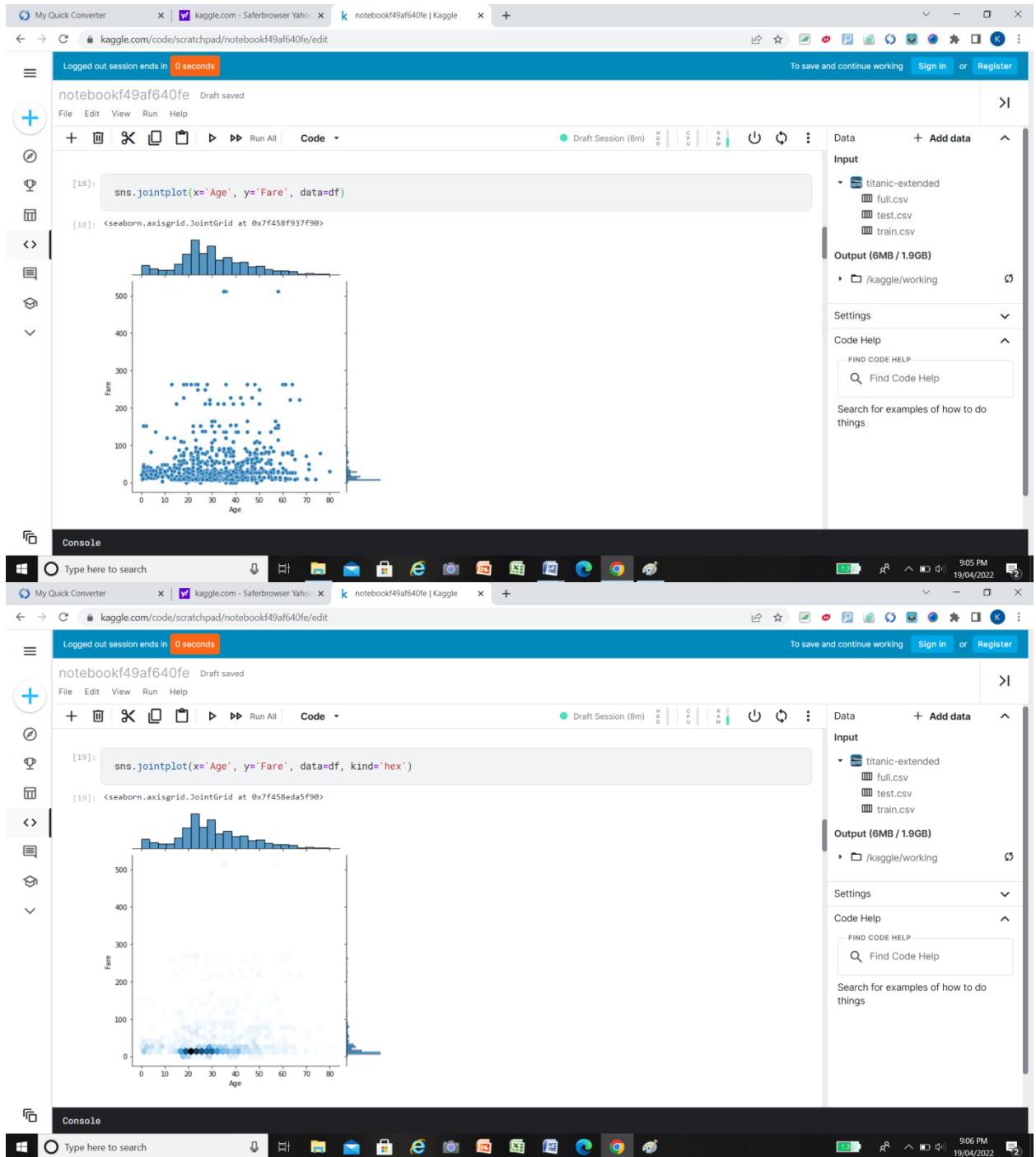
[15]: sns.distplot(df['Fare'], kde=False)

Console

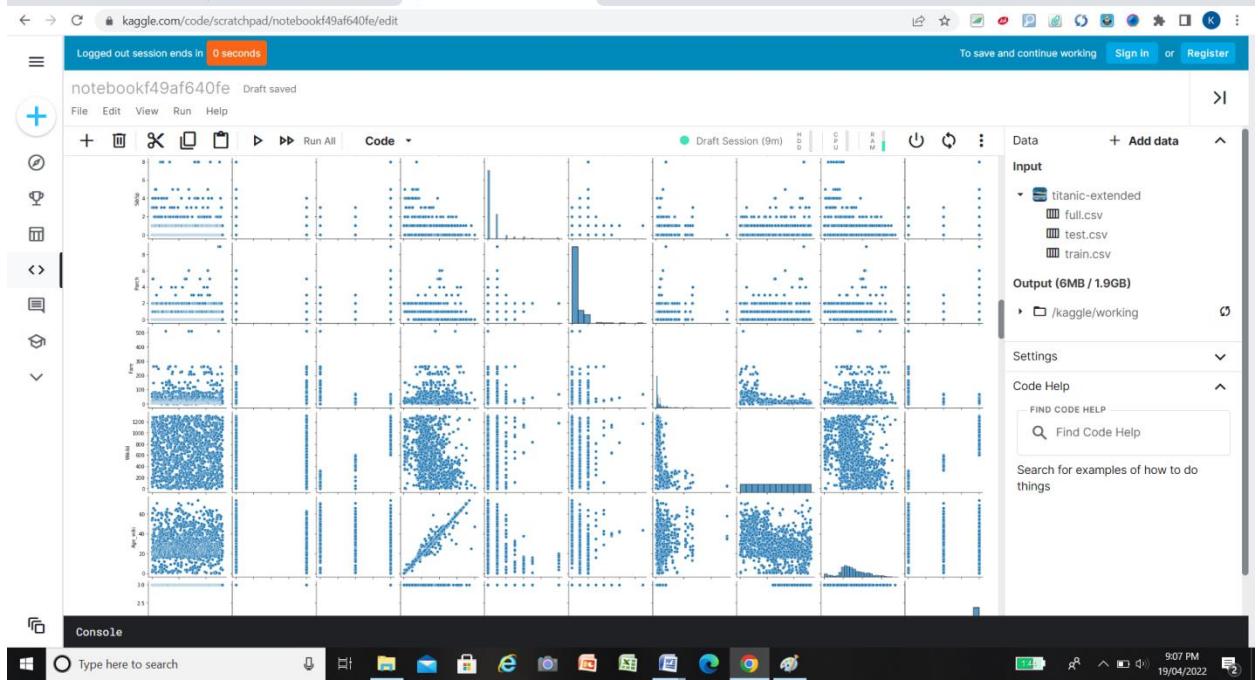
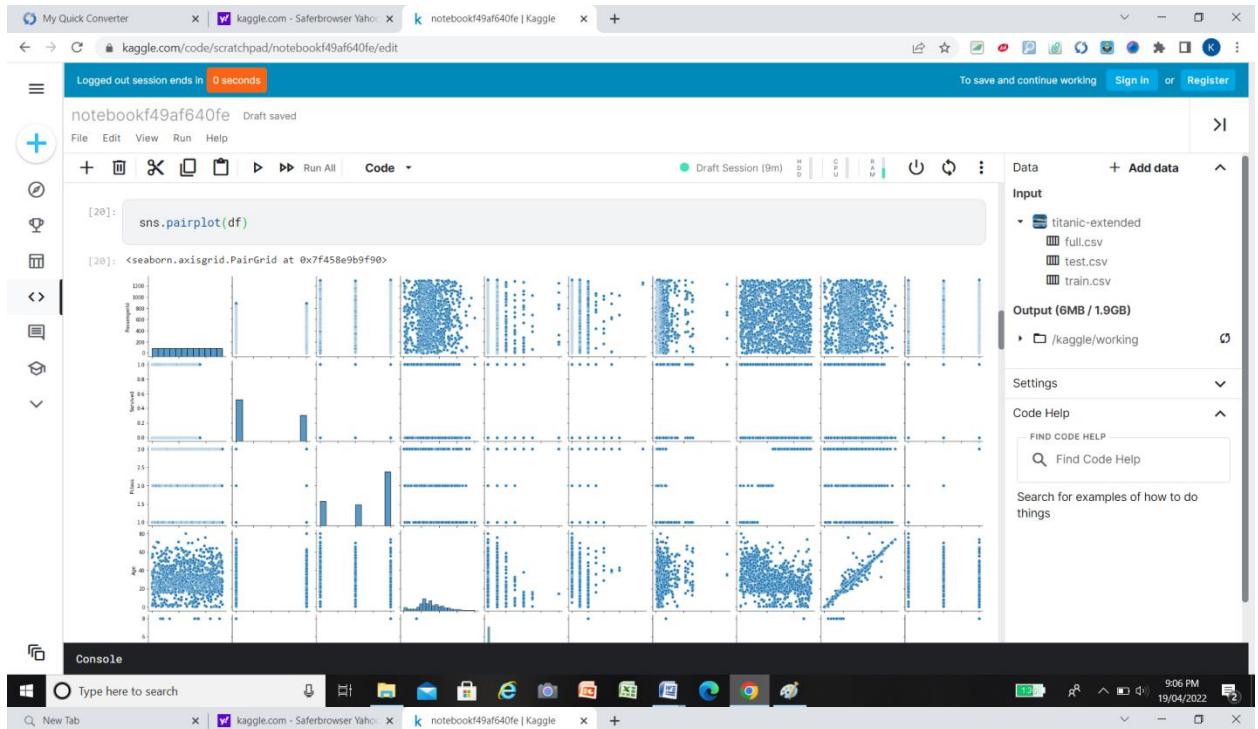
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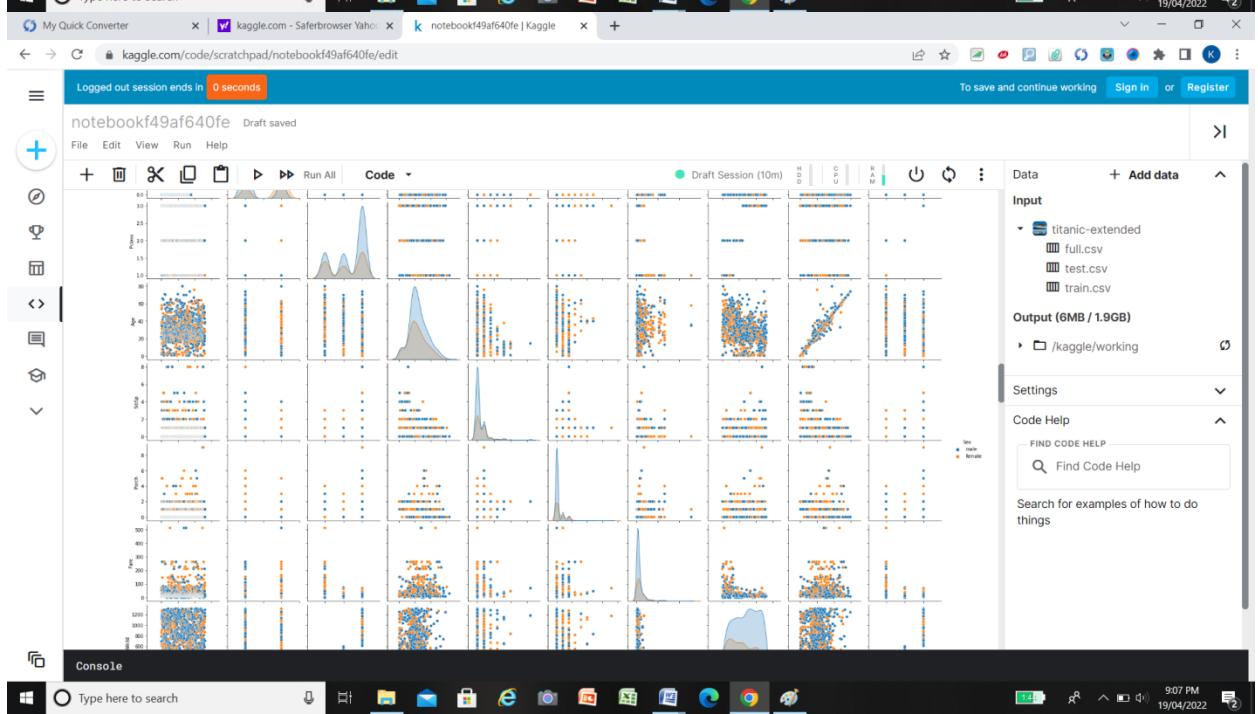
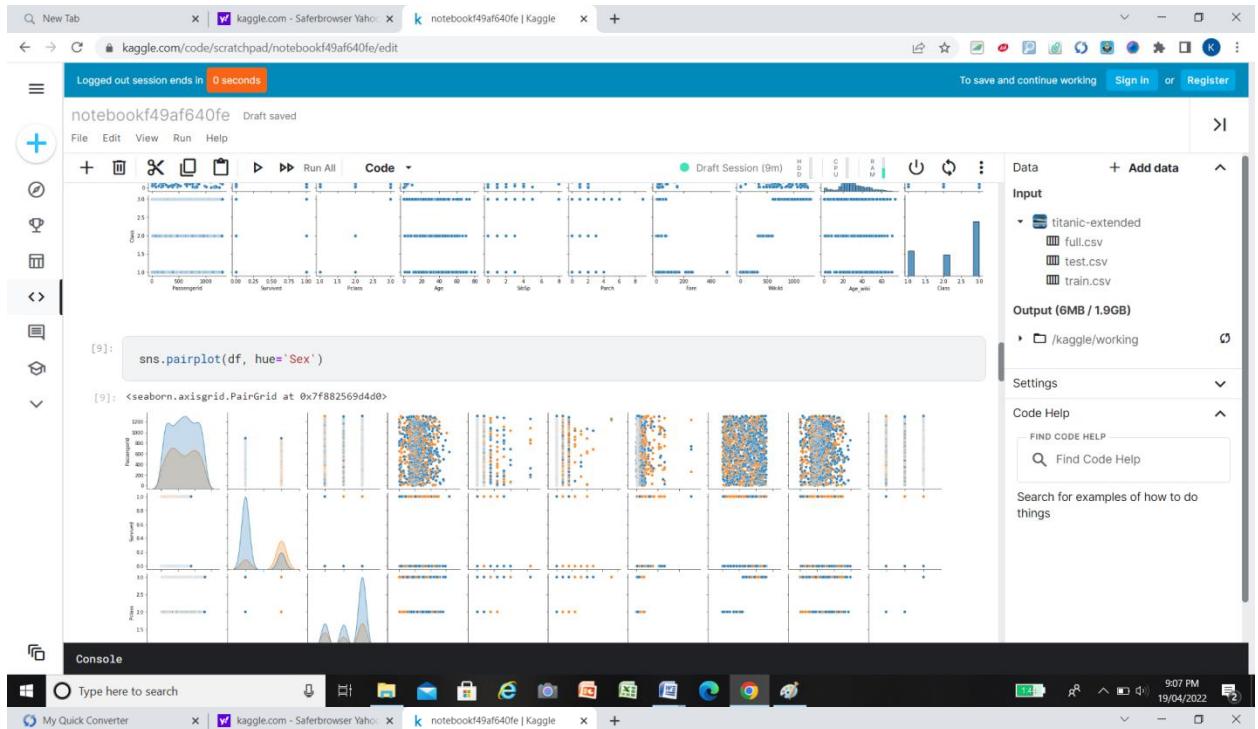


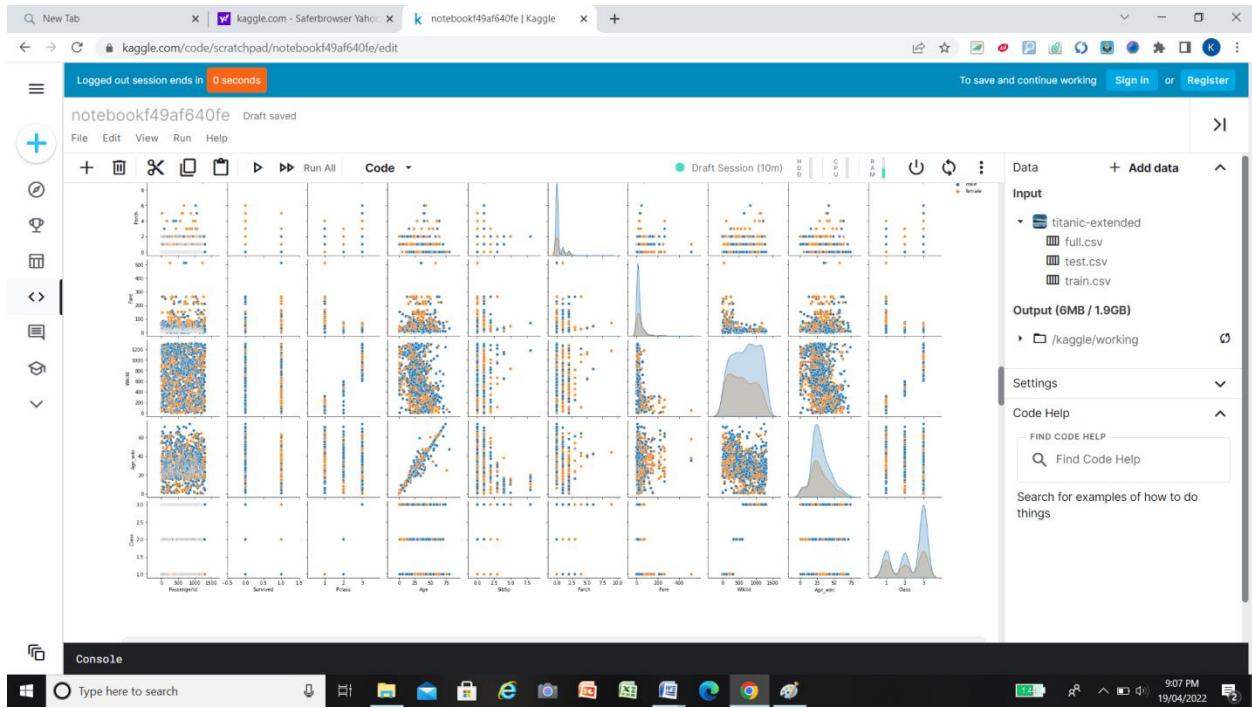
## The Joint Plot :



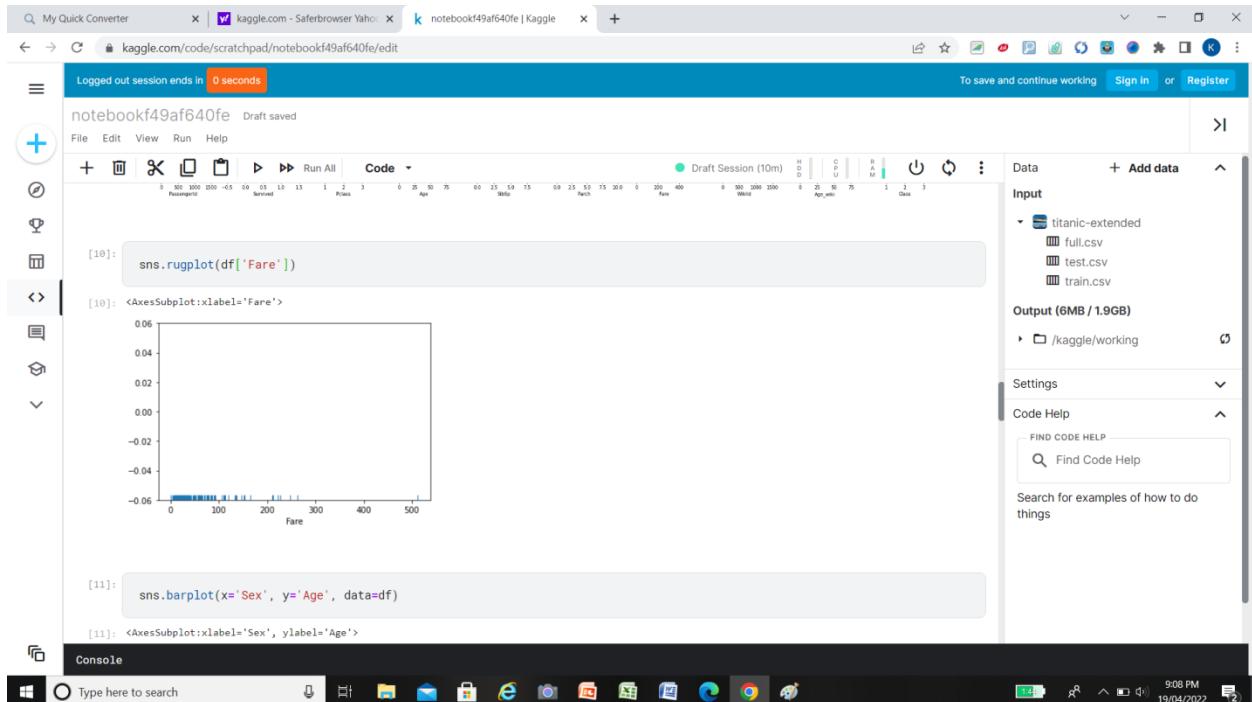
## The Pair Plot :



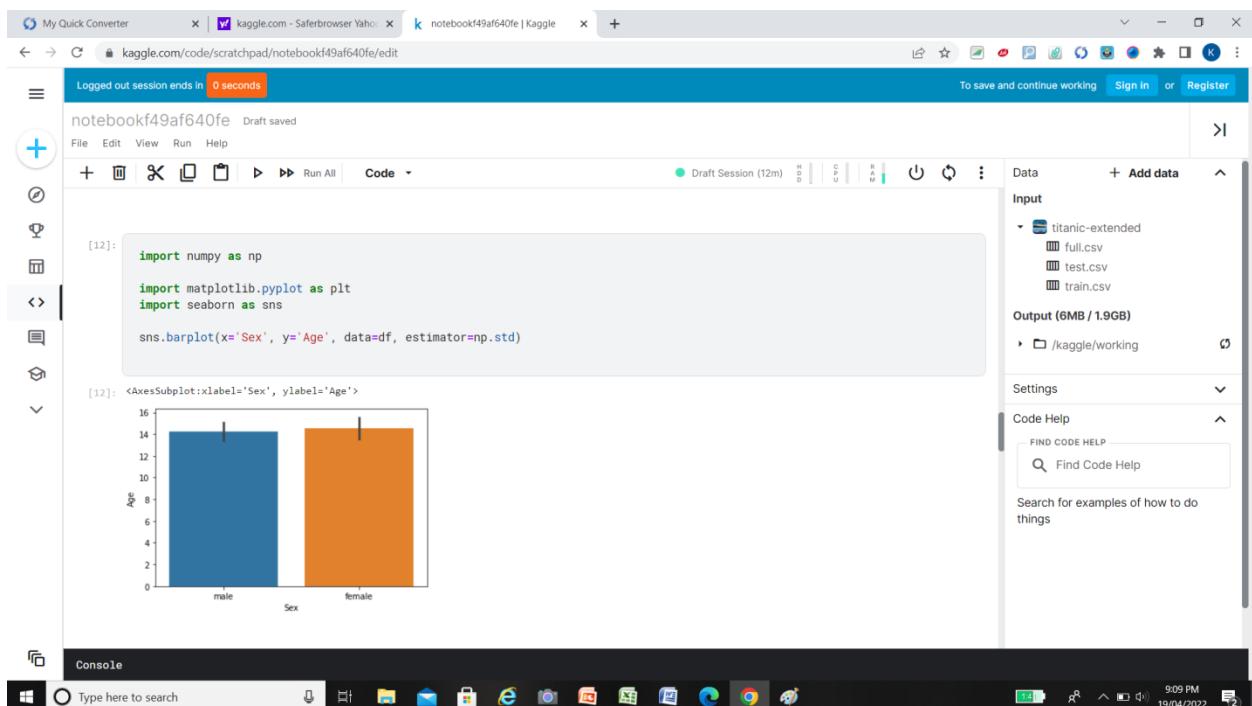
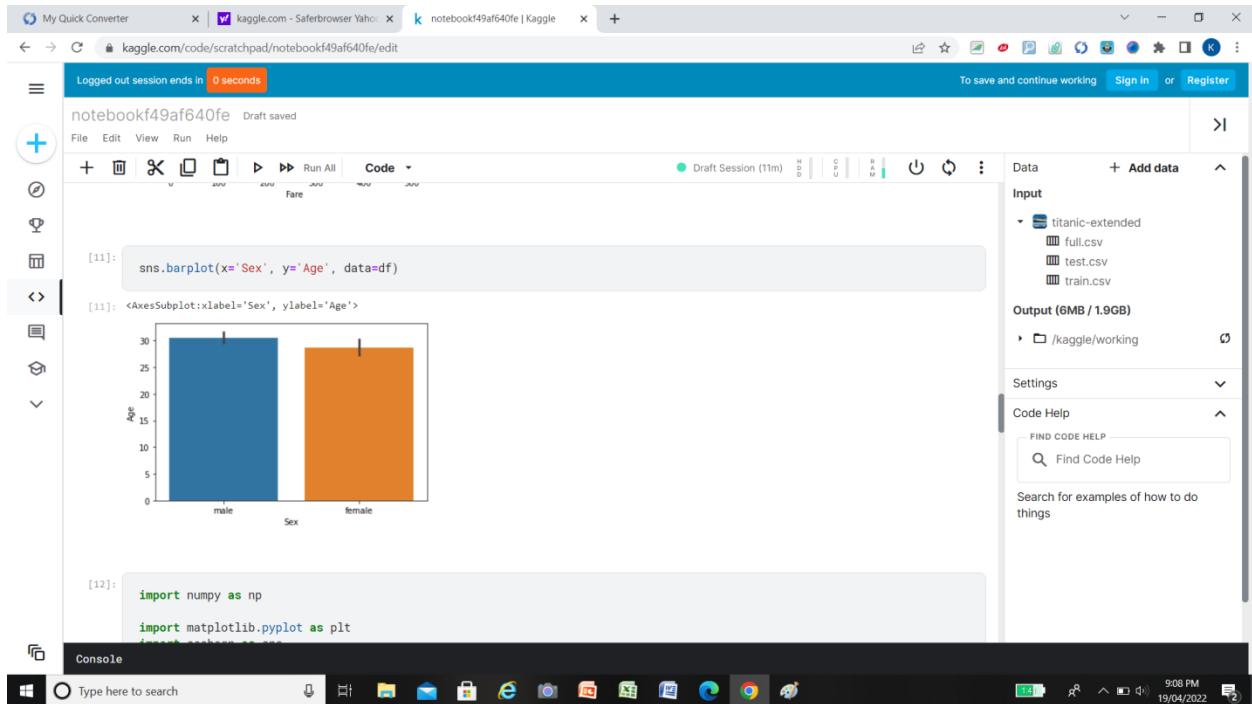




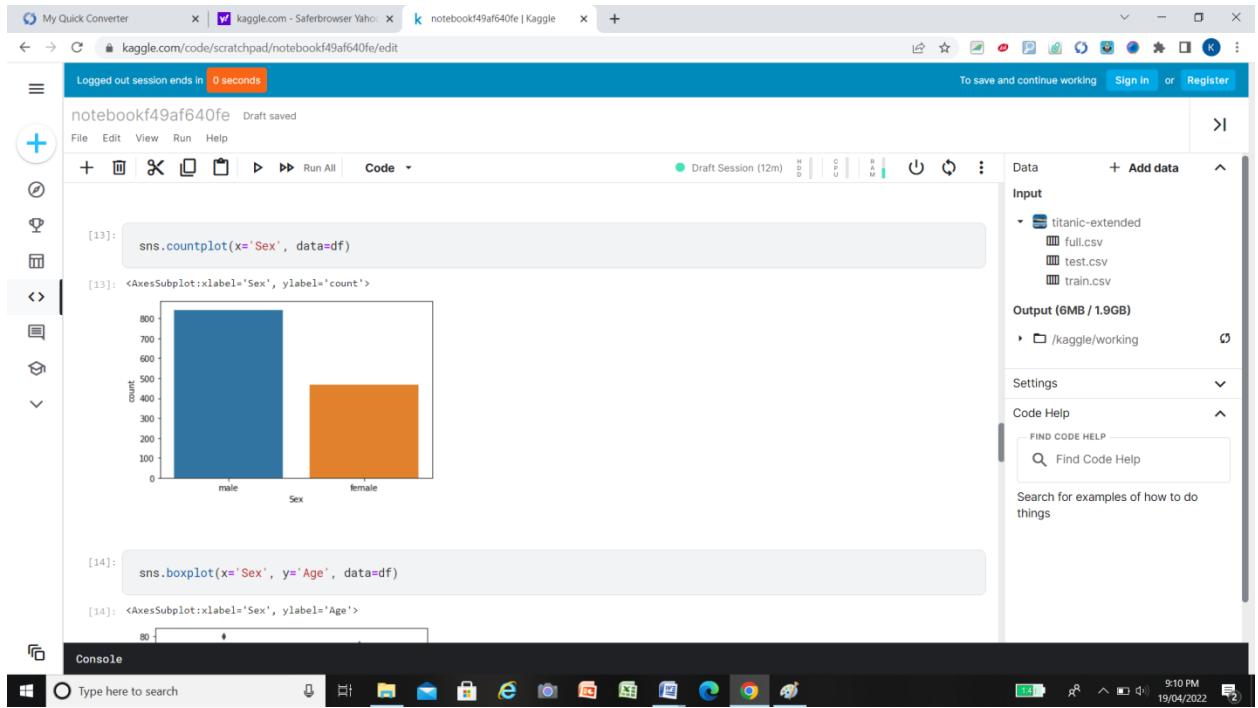
## The Rug Plot :



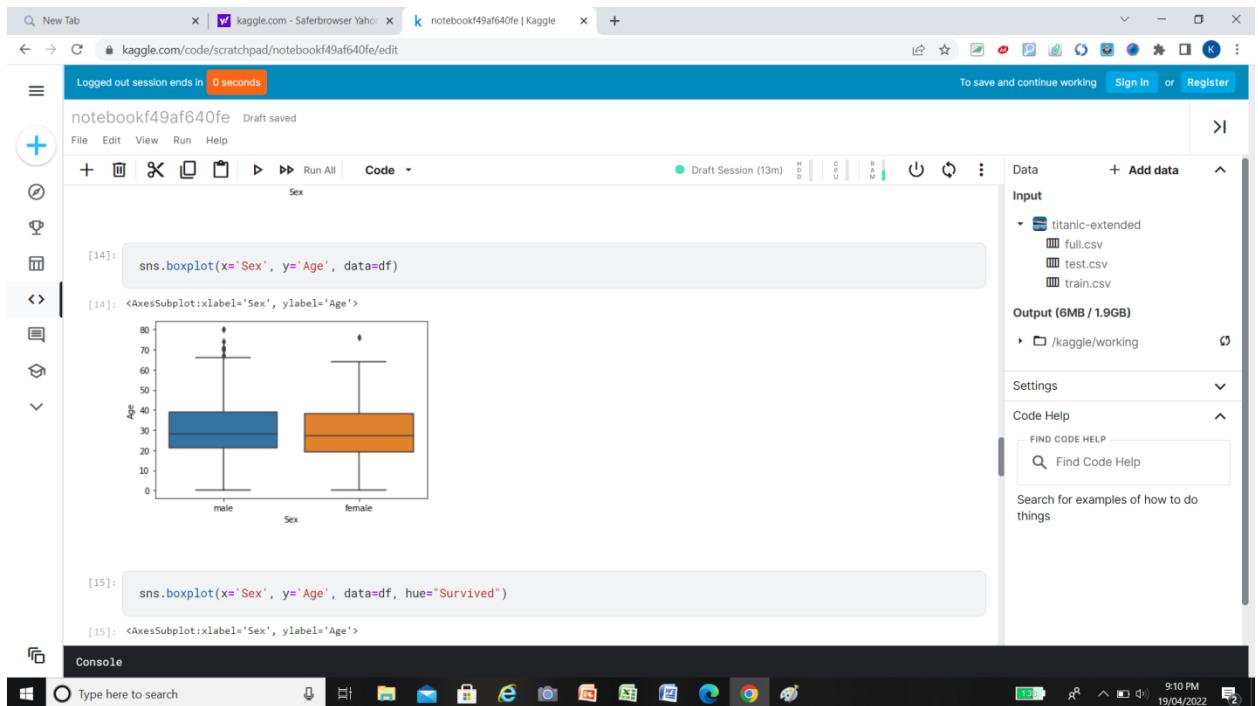
## The Bar Plot :

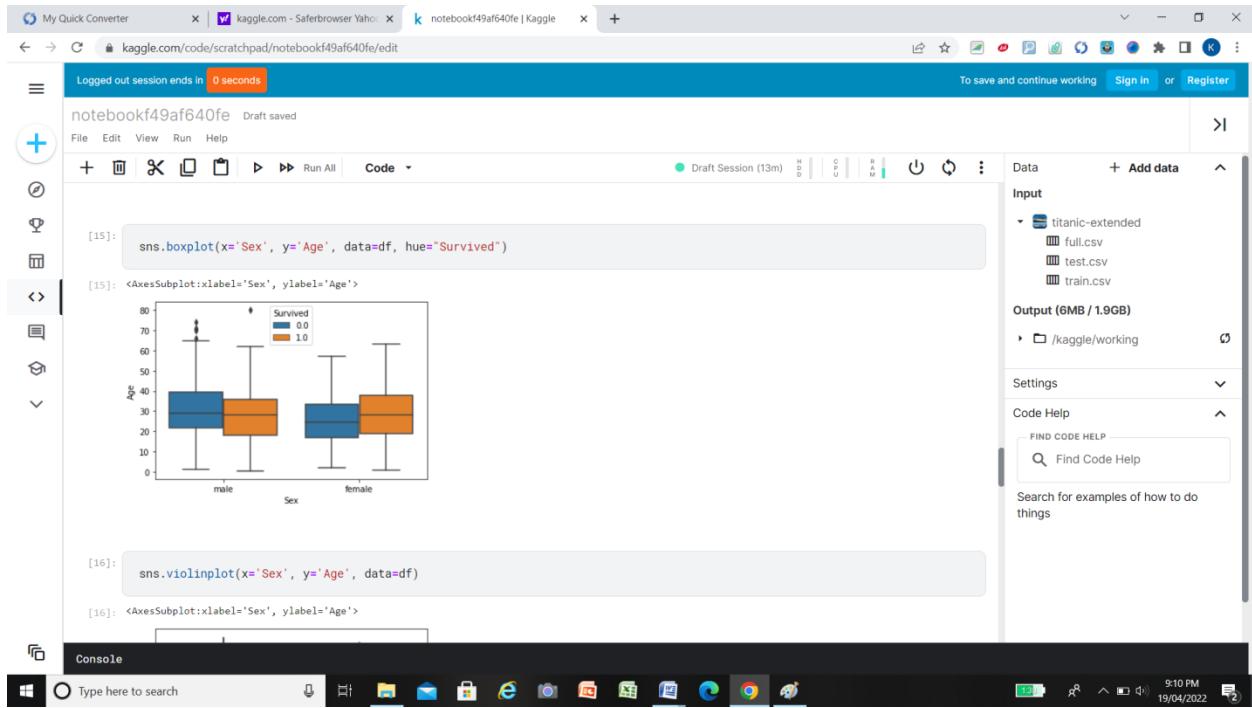


## The Count Plot :

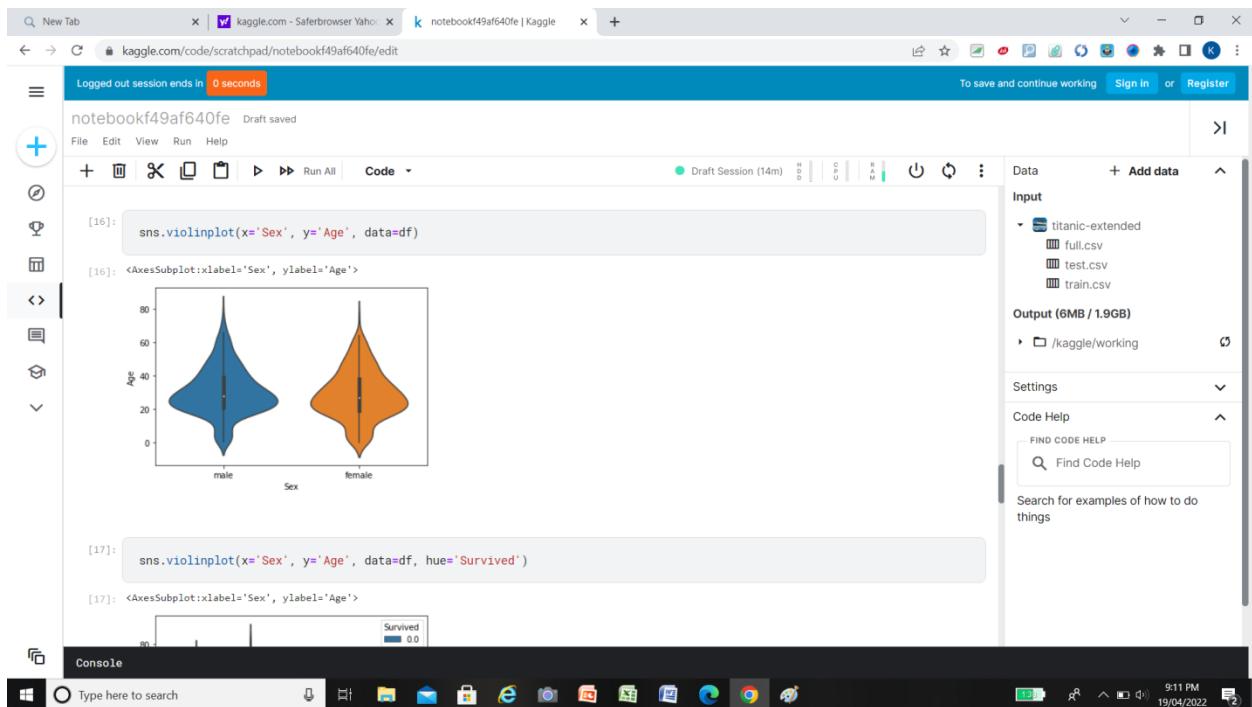


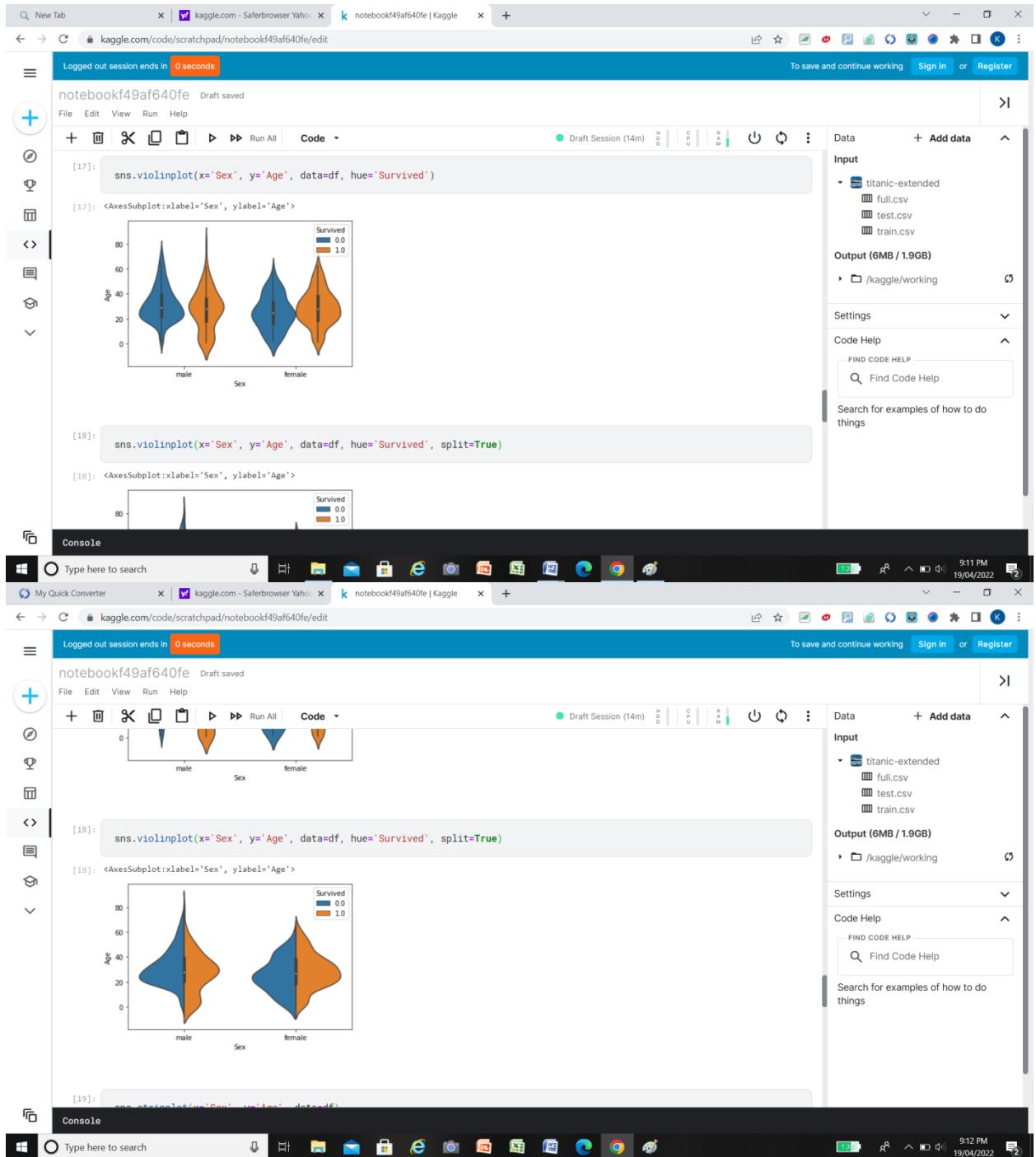
## The Box Plot :



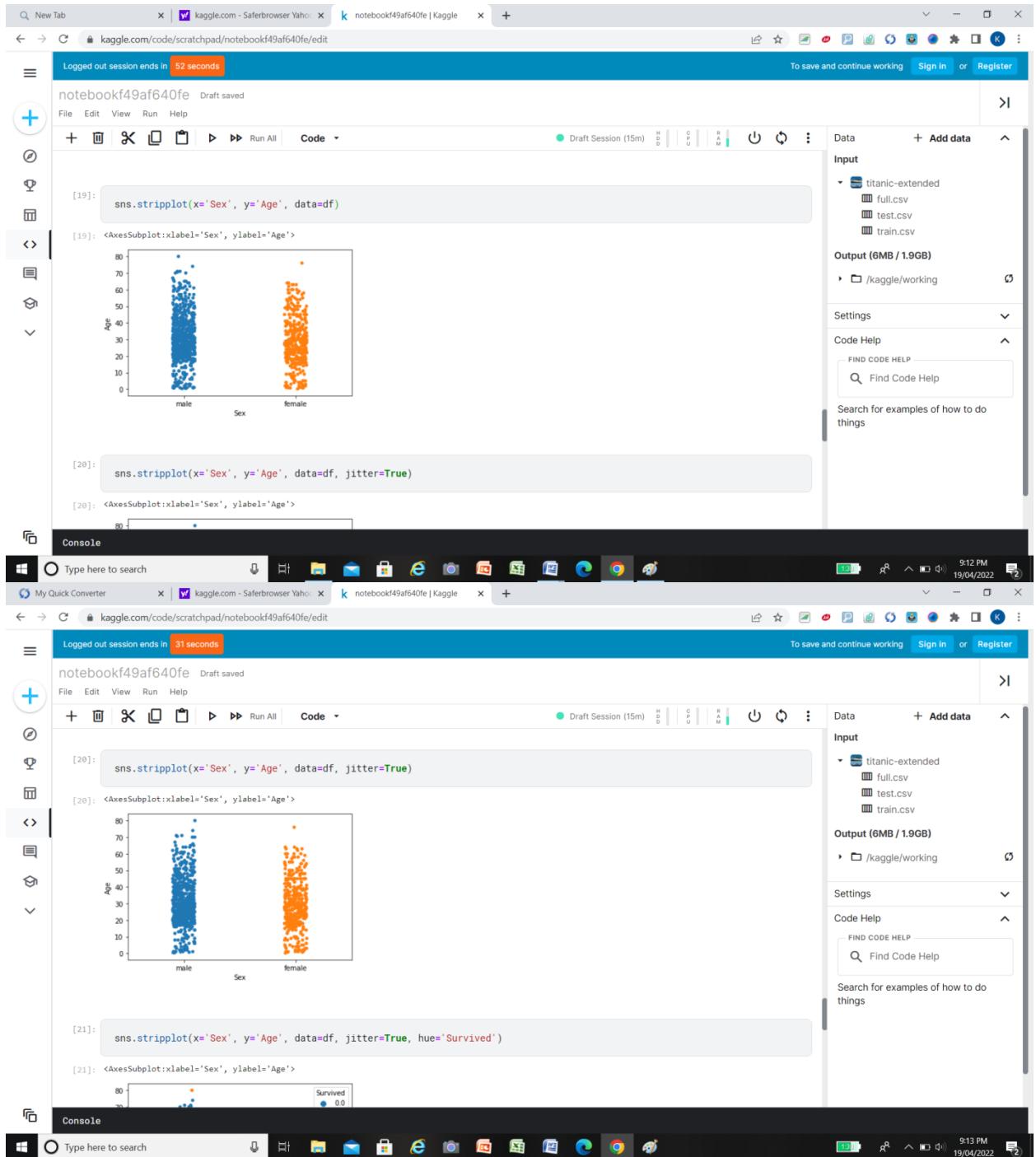


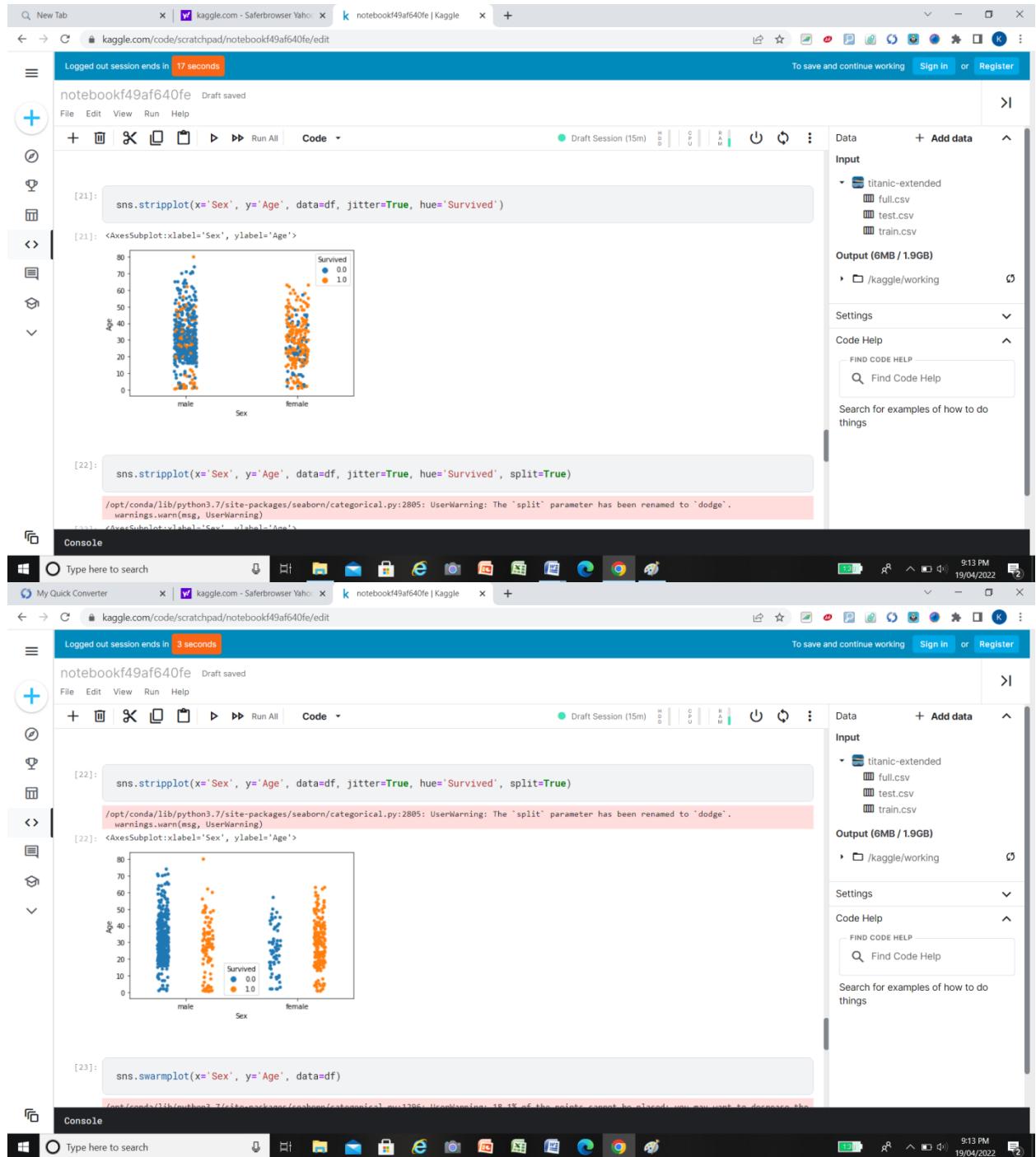
## The Violin Plot :



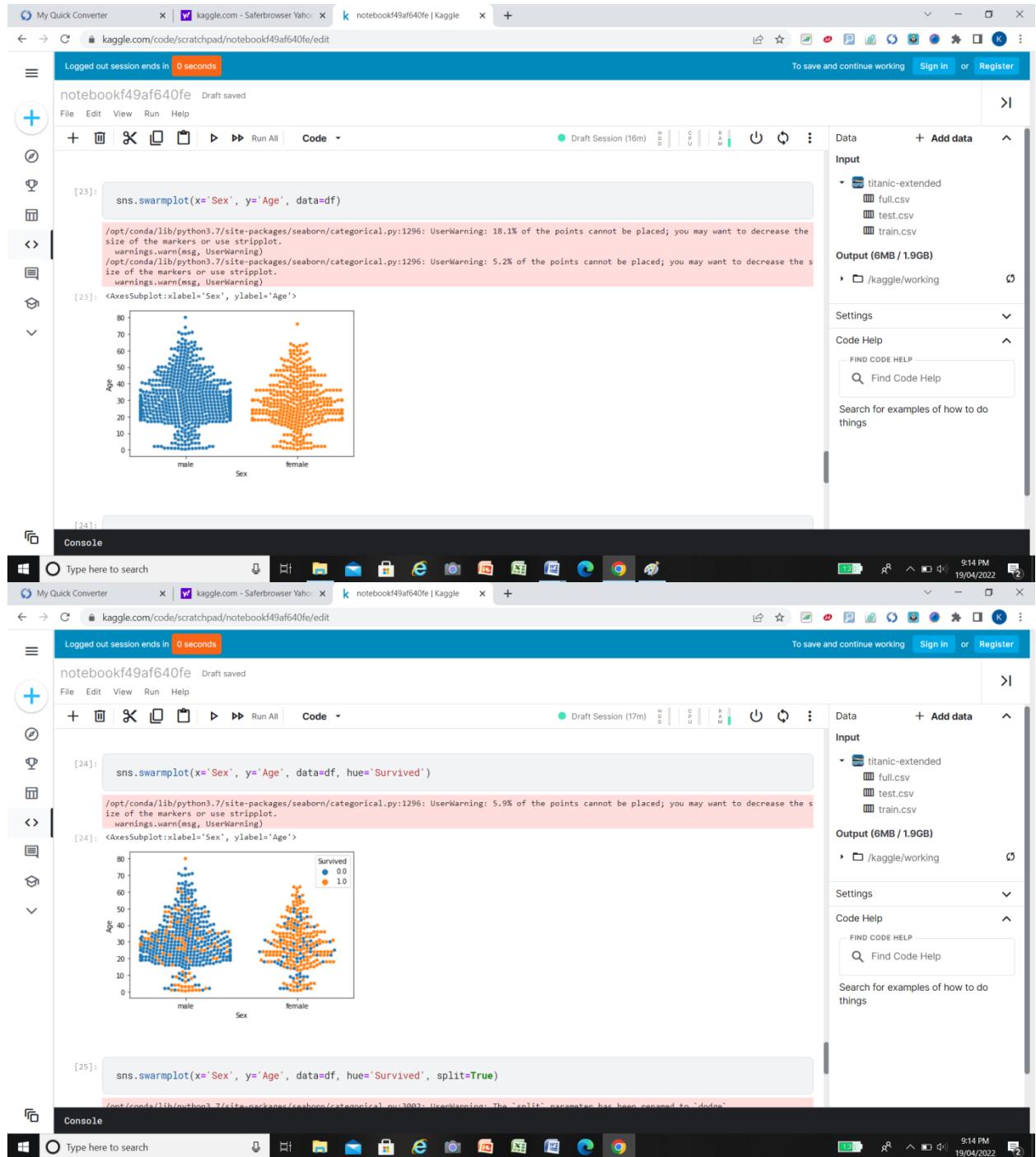


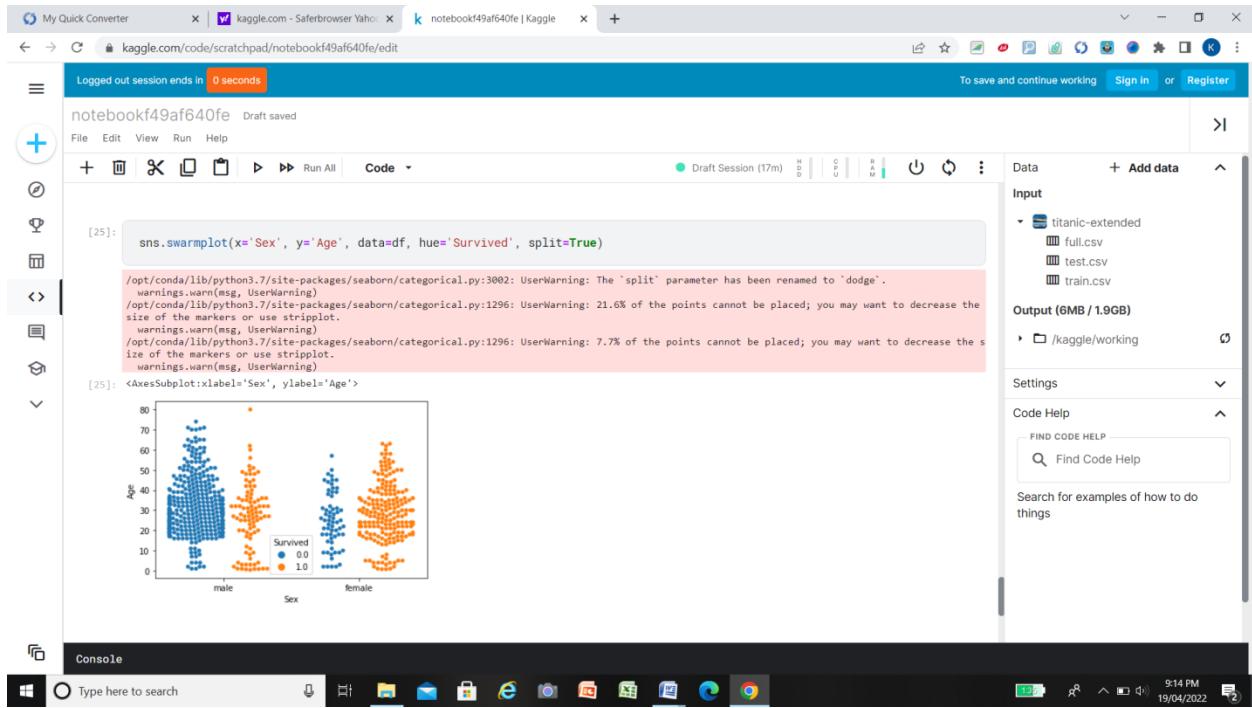
## The Strip Plot :





## The Swarm Plot :





## Combining Swarm and Violin Plot :

