**ASSIGNMENT 4**

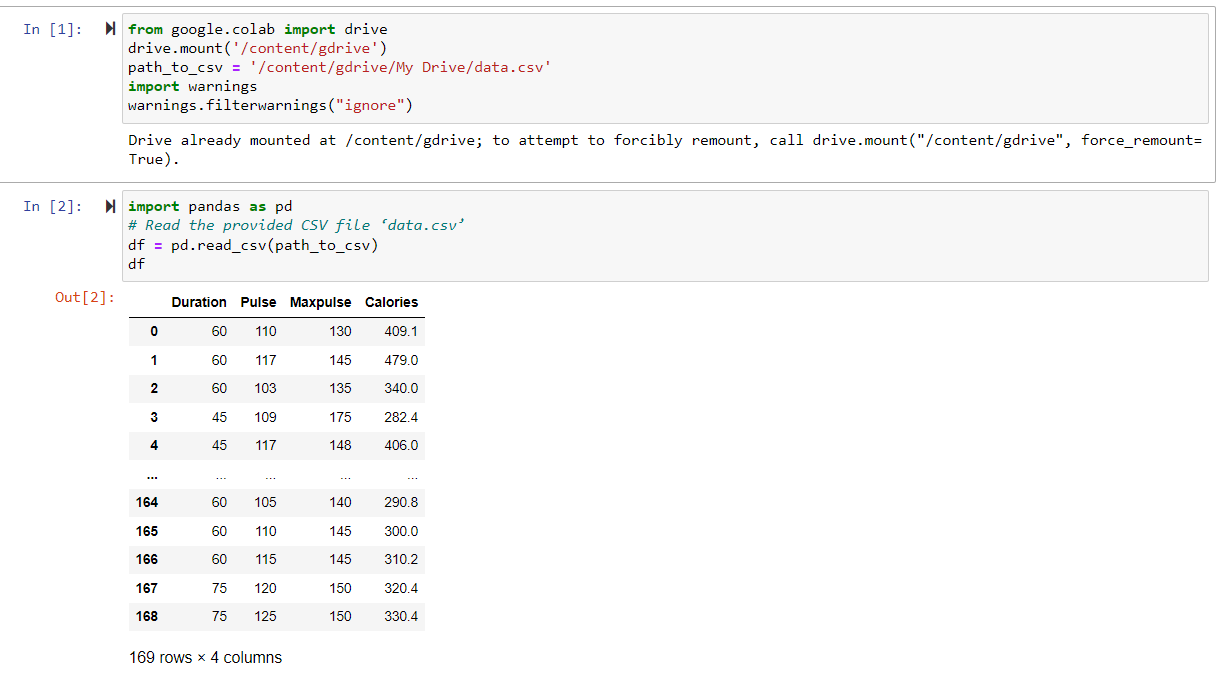
**Name:** Shameer Shaik

**Student ID:** 7007405840

**CRN:** 21627

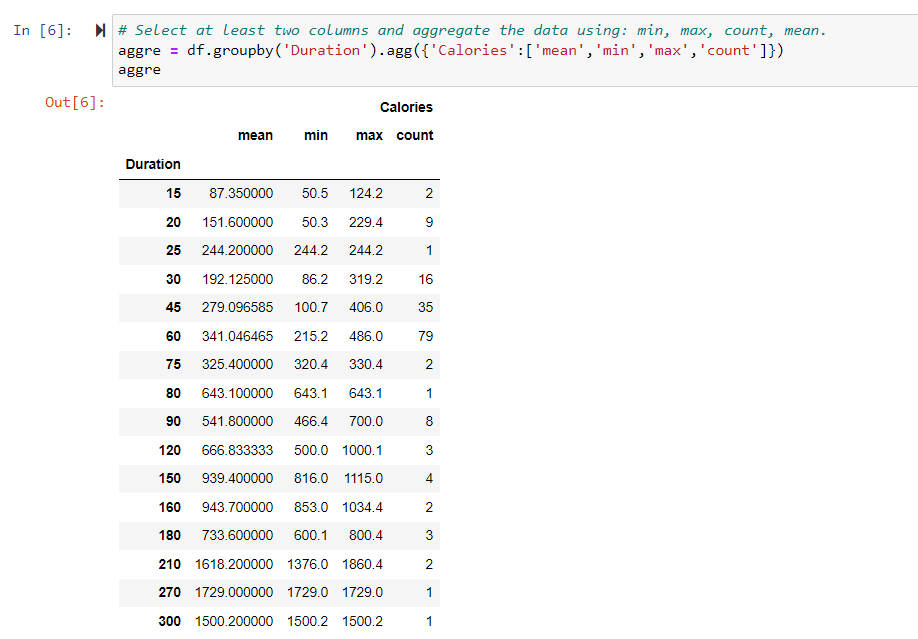
**GitHub link:** <https://github.com/SHAMEERSHAIK7/Machine-Learning-CS-5710>

**Video link:** <https://vimeo.com/815234954/2838e72c27>

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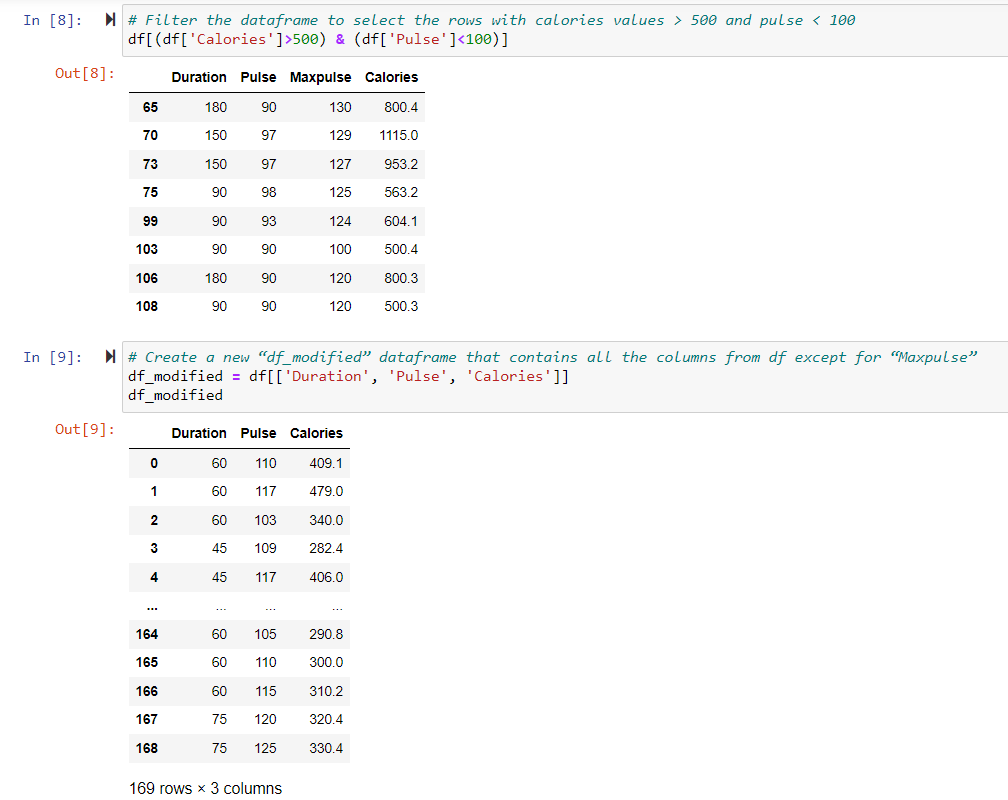
**Graphical user interface, text, application, email

Description automatically generated**

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**A picture containing graphical user interface

Description automatically generated**

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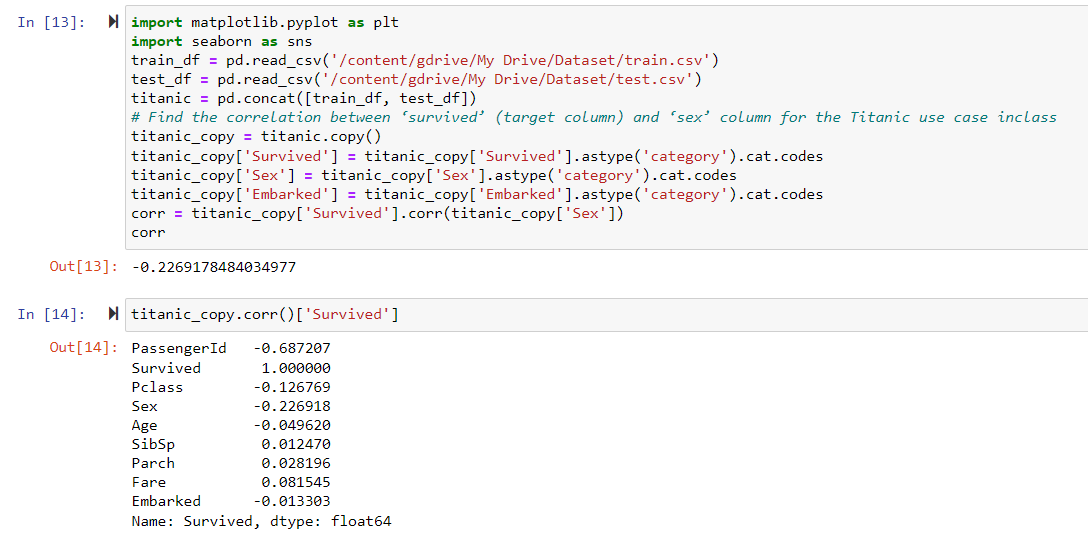
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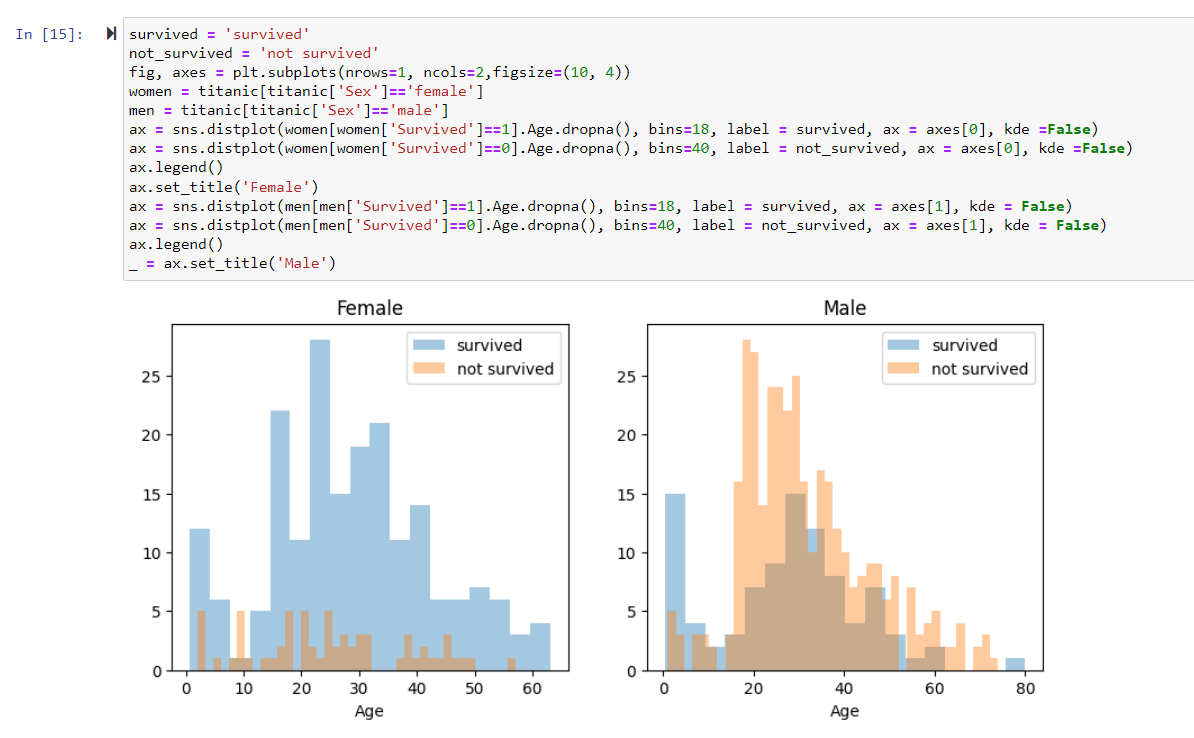
Description automatically generated with medium confidence**

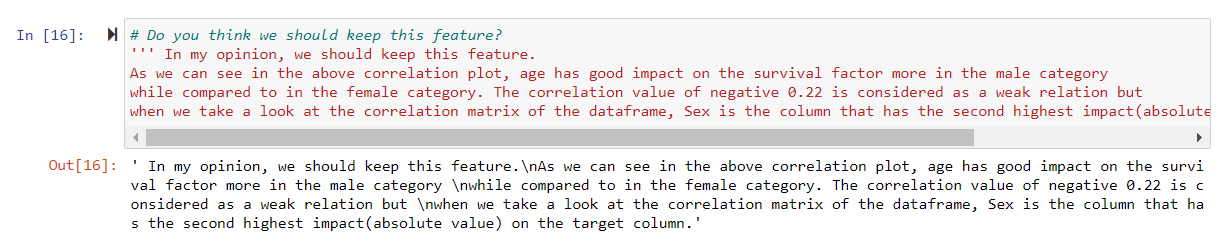
**Chart, scatter chart

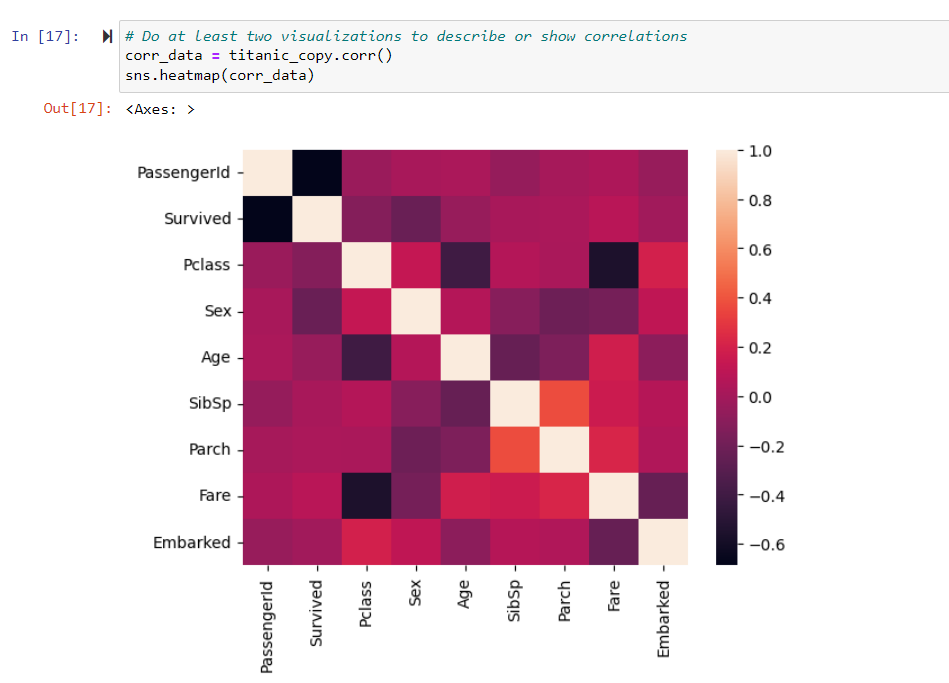
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**Titanic Dataset:**

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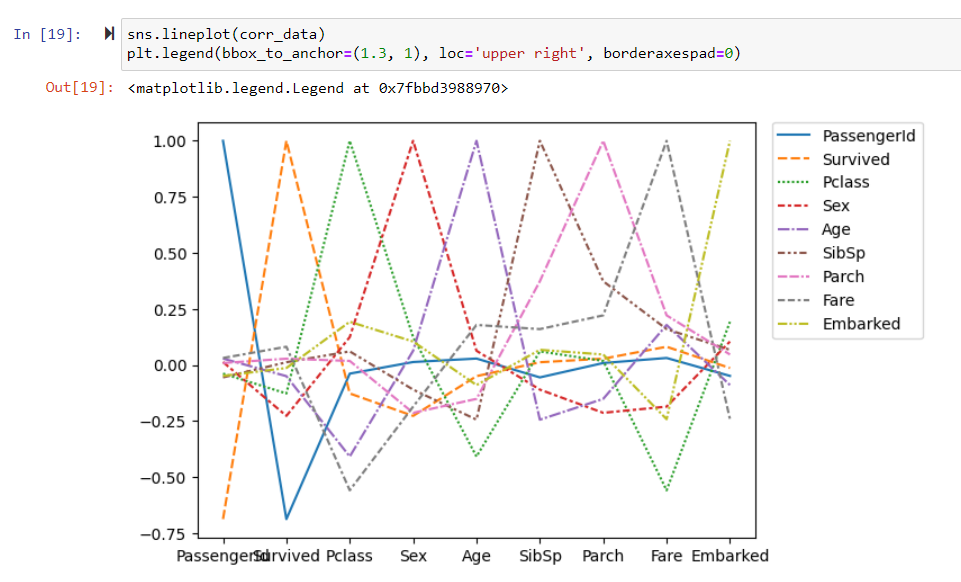
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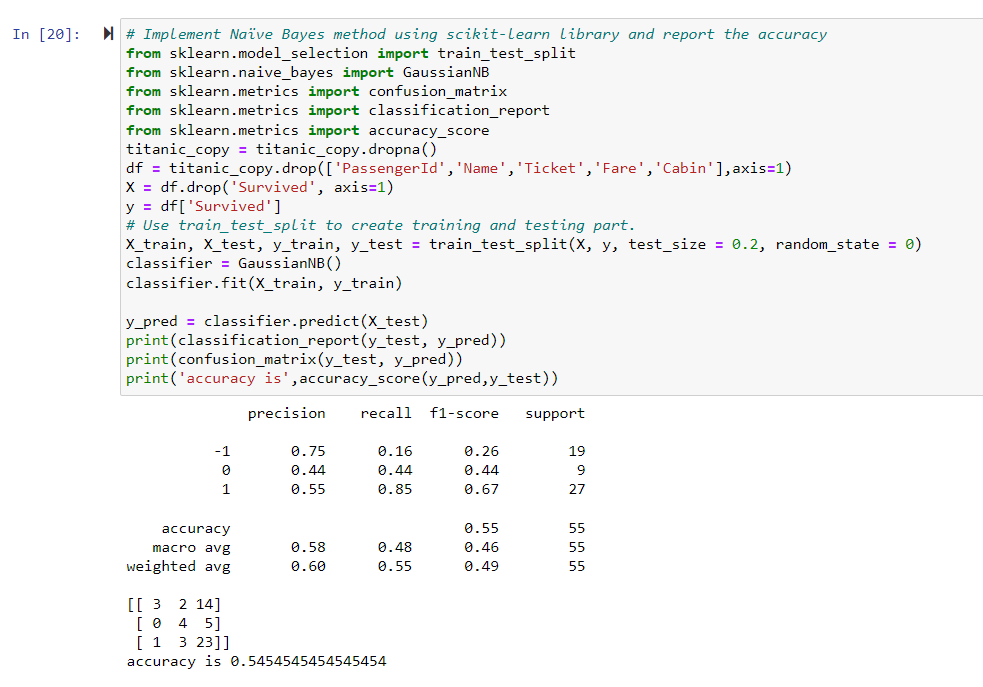
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**Chart, scatter chart

Description automatically generated**

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**Glass dataset:**

**Text

Description automatically generated with medium confidence**

**Text

Description automatically generated with low confidence**

**Treemap chart

Description automatically generated with low confidence**

**Chart, scatter chart

Description automatically generated**

The algorithm in the Naïve Bayes method using scikit-learn library has better accuracy than the linear SVM method using scikit library. The Naive Bayes algorithm is extremely quick. It is based on conditional probabilities, which are simple to use and assess.

As a result, an iterative approach is not needed. When it comes to non-linear classification jobs, SVM is more effective. In high dimensional spaces, such as those corresponding to literature, SVM generalizes well.