**Assignment-3**

**Kiran Kumar Kongari**

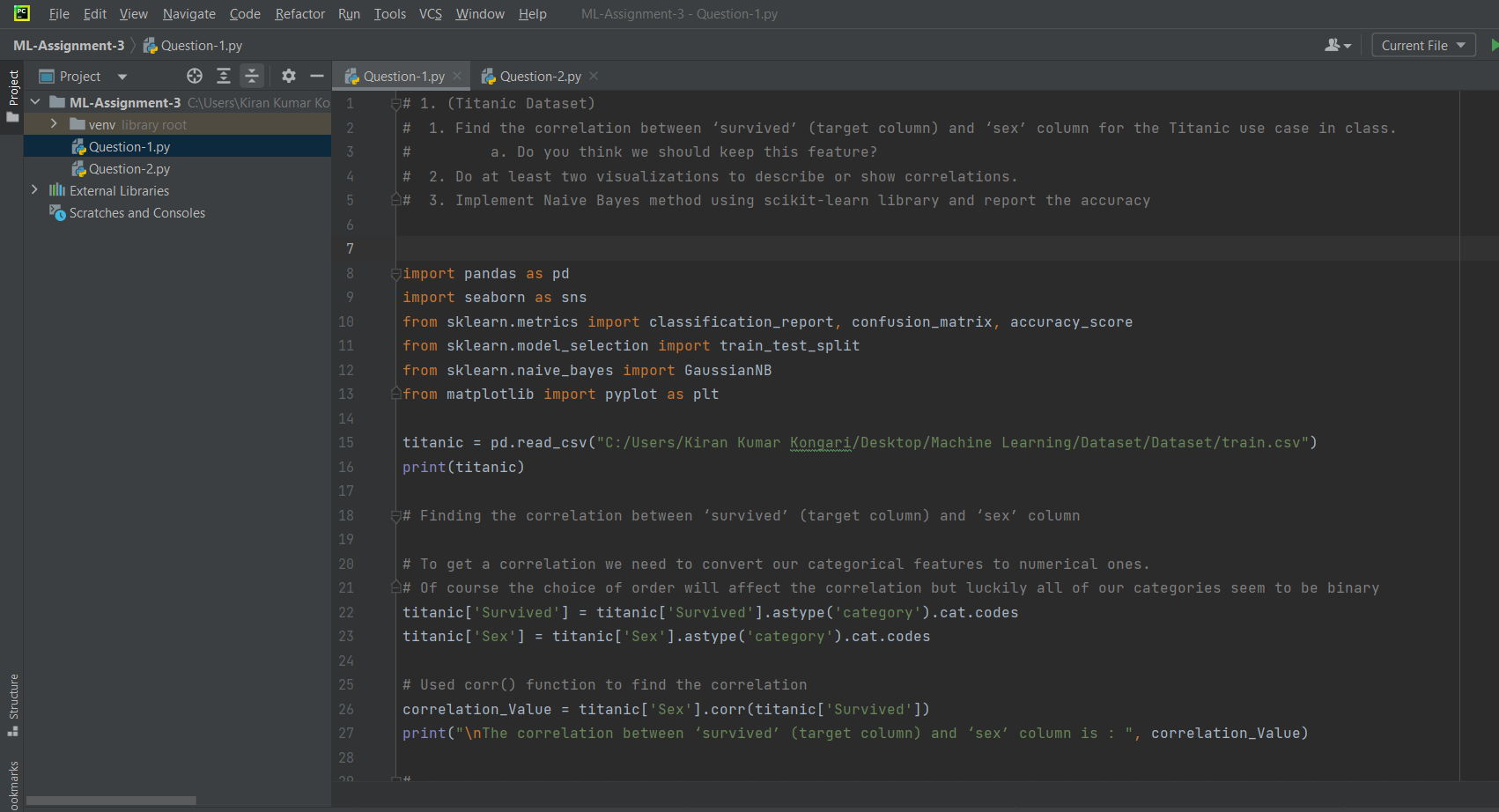
**700734361**

**“For both the questions I have considered 80% of the dataset as training data and 20% of the dataset as testing data.”**

**A picture containing text

Description automatically generated**

**Code:**

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**Text

Description automatically generated**

**A screenshot of a computer

Description automatically generated with medium confidence**

**A screenshot of a computer

Description automatically generated**

**Output:**

**Text

Description automatically generated**

**A picture containing text

Description automatically generated**

**Heatmap plot:**

**Graphical user interface

Description automatically generated**

**Histplot:**

**Chart

Description automatically generated with medium confidence**

**Scatterplot:**

**Chart, scatter chart

Description automatically generated**

**Graphical user interface, text, application, email

Description automatically generated**

**Code:**

**A computer screen capture

Description automatically generated with medium confidence**

**Text

Description automatically generated**

**A screenshot of a computer

Description automatically generated with medium confidence**

**Output:**

**Text

Description automatically generated**

**Linear Support Vector Machine on first run:**

**Text

Description automatically generated**

**Linear Support Vector Machine on first run:**

**A picture containing calendar

Description automatically generated**

**A computer screen capture

Description automatically generated with medium confidence**

**Chart, treemap chart

Description automatically generated**

**Chart, bar chart

Description automatically generated**

**Chart, scatter chart

Description automatically generated**

**Which algorithm you got better accuracy? Can you justify why?**

On every run LinearSVC is giving different accuracy value sometimes more and sometimes less value, the reason for that is LibLinear contains a random number generator, the seed of which we do not control. So it is indeed normal. Whereas coming to Naïve bayes it is giving an accuracy of 0.3720 every time. So based on the observation unable to predict which one is better. But considering consistency Naïve bayes is better.