**ASSIGNMENT-3**

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**COURSE: MACHINE LEARNING**

**1. (Titanic Dataset)**

**1. Find the correlation between ‘survived’ (target column) and ‘sex’ column for the Titanic use case in class. a. Do you think we should keep this feature?**

**2. Do at least two visualizations to describe or show correlations.**

**3. Implement Naïve Bayes method using scikit-learn library and report the accuracy**

**OUTPUT:**

**A picture containing icon

Description automatically generated**

**Text

Description automatically generated**

**Graphical user interface, text

Description automatically generated**

**Graphical user interface, application, table

Description automatically generated**

**Chart

Description automatically generated**

**Table

Description automatically generated**

**2. (Glass Dataset)**

**1. Implement Naïve Bayes method using scikit-learn library.**

**a. Use the glass dataset available in Link also provided in your assignment.**

**b. Use train\_test\_split to create training and testing part.**

**2. Evaluate the model on testing part using score and classification\_report(y\_true, y\_pred)**

**OUTPUT:**

**Table

Description automatically generated with medium confidence**

**Application, table

Description automatically generated**

**Table

Description automatically generated**

**1. Implement linear SVM method using scikit library**

**a. Use the glass dataset available in Link also provided in your assignment.**

**b. Use train\_test\_split to create training and testing part.**

**2. Evaluate the model on testing part using score and classification\_report(y\_true, y\_pred)**

**Do at least two visualizations to describe or show correlations in the Glass Dataset.**

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

**OUTPUT:**

**Table

Description automatically generated**

**A picture containing chart

Description automatically generated**

**Table

Description automatically generated with medium confidence**