# **Srikanth Majhi**

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# **Github Link :** [**https://github.com/SrikanthMajhi/ML-Assignment-3**](https://github.com/SrikanthMajhi/ML-Assignment-3)

# **Question – 1**

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?

**Ans: Yes the feature is highly needed as it having highest mean and it is classifying perfectly that female passengers survived more and more correlation with survived.**

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

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

**Source Code:**

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# **Question – 2**

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)

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?

**Ans : Naïve Bayes is providing highest accuracy than Linear SVC because of its high speed.**

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Background pattern

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