**Ques.** Please produce a brief write up on your last project in the field of Data science in less than 200 words.

The project was on variants of red wine, and I trained three machine learning models to determine the quality of different red wines in accordance with their chemical properties such as the amount of sulphates present in them, their pH levels, and their alcohol content. The dataset was taken from the UCI Machine Learning Repository.

After downloading the dataset, I performed Exploratory Data Analysis on the dataframe, and analysed the different types of distributions. I used Plotly and Seaborn for data visualization and made interactive charts and heat maps to show the relationship between two features of the dataframe.

Continuing, I performed Data Pre-processing and divided the various wines into two categories, low-quality wine, and high-quality wine, and then separated the training and test sets.

I trained my three classification models on the training sets and then checked their score on the test set, trying to figure out which classification model worked the best for my dataset. I performed hyperparameter tuning to get the best parameters for my models, and evaluated the models to calculate the accuracy, confusion matrix, and print the classification report.

The link for my project’s GitHub repository is:

<https://github.com/AnushkaGupta18/Classification-Models-for-Red-Wine-Dataset>