

Regression models results: I have tried the wine quality data with regression models such as multiple linear regression and random forest regression. For multiple linear regression, the mean squared error (MSE) was **0.389**, while the MSE for the random forest regression model was **0.098**, which is substantially smaller than multiple linear regression. I have also tried other regression models, and for them, the MSE was higher. Polynomial regression of degree 3 generated an MSE value of about **0.78**.

Classification models results: The performance of the classification models with the wine quality is noticeably worse. For Naïve Bayes classification model, the accuracy was only **66.875%**. Decision tree classification model performed slightly better, it had an accuracy of **65%**.