**Title of the project:** Tesla Stock Price Prediction Using Regression Model

**Name of the Students:** Aruna K

Astalakshmi G

Preethi B

**Register Number(s):**  211419104020, 211419104028, 211419104200

**Name of the Guide:** Dr.K.Sangeetha,M.E.,Ph.D.,

**ABSTRACT**

Stock prices are initially set by an initial public offering (IPO), which occurs when a company first issues its shares on the market. Investment companies use a variety of metrics, including the total number of shares being offered, to calculate the price of a stock. The share price will then fluctuate as a result of the factors mentioned, with potential business earnings having a substantial impact. Using financial metrics including a company's earnings history, market movements, and the profit it is predicted to make, traders regularly evaluate a company's value. As a result, stock price forecasting has grown in significance as a field of study. Forecasting machine learning-based stock price prediction techniques is the aim. Univariate, bivariate, and multivariate analysis are used to analyse the dataset using SMLT's supervised machine learning technique (SMLT). to offer an approach based on machine learning for accurately forecasting stock price. The proposed machine learning algorithm technique can be compared to the best accuracy in terms of precision, recall, and F1 Score.The best model, or the one with the highest accuracy, is then chosen after a comparison of the four, and it is implemented into a webpage. The algorithms used are Adaboost algorithm, Decision tree algorithm, Lasso regression and Ridge regression. The four models are then compared and the best one ie. the one with highest accuracy is deployed into a webpage. The highest accuracy obtained from the above algorithms is 99.83%. This work provides a webpage for Tesla stock price prediction with accurate results.