

LINEAR REGRESSION USING PEOPLE SURVEY

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Abstract : The main objective is to compare the attribute to visualize the People survey by winning and losing. Linear regression may be a linear approach to modelling the connection between a scalar response and one or more explanatory variables. In this linear regression we calculate the total no of votes. Thus we can predict the winning and losing by comparing two attributes and by using machine learning algorithm.

Key Words-People survey, linear regression.

I. INTRODUCTION

The main objective is to analysis attribute to visualize the People survey by winning and losing with Result. By this we can analysis the win and lose. Python is used for analysing and visualizing the data. The algorithm that is used for analysing the data is Linear Regression. Linear regression quantifies the connection between one or more predictor variable(s) and one outcome variable. Linear regression is usually used for predictive analysis and modelling. Linear regression is additionally referred to as multiple correlation, multivariate regression, ordinary method of least squares (OLS), and regression. Linear regression is a linear approach to modelling the relationship between a scalar response and one or more variables. That assumes a linear relationship between the input variables(x) and output variables(y). By using electors and total vote poll we can predict total no of votes.

II.OBJECTIVE

To create an attribute people survey percentage compare with result, and also using Linear Regression Algorithm.

III.RELATED WORK

Voting Behaviour in India captures the multiple methodologies used for measuring voting behavior in India . The authors expand on the 14 various approaches used to assess the views, behaviors and beliefs of the electorate. They address the benefits and disadvantages of each form of gathering the multiplicity of electoral experience of multiple voters through various settings in India. This accomplish utilizing their long experience of conducting national- and state-level election surveys in India and by simultaneous studies using different methodologies.[1]

A recent study entitled "Analysis of Funds Collected and Expenditure Involved by Political Parties during the 2004-2005 elections" released by the Association of Democratic Reforms (ADR) indicates that, collectively, for the Lok Sabha elections conducted in 2004, 2009 and 2014, the political parties disclosed a cumulative collection of Rs. 2355.35 crores. Their overall election expenses were Rs. 2466.07 crores, with Rs. 1587.78 crores officially spent on Lok Sabha's 2014 elections alone. Unofficial estimates by some news agencies²² suggest that the overall expenditure by candidates and political parties for the 2014 Lok Sabha elections may probably be quite Rs. 30,000 crores. [2]

Results of state elections in India yield varied and unique insights. While national news outlets do a fairly good job of analyzing and communicating federal elections, state elections, on the other hand, have remained largely devoid of rigorous analysis and informed communication. The Assembly elections held in the state of Tamil Nadu in May 2016, we present a process and set of interaction design and visualization methods to present complex insights, but also empower readers, depending on their level of interest and civic engagement, to go beyond what is presented and to discover new insights for themselves.[3]

IV. METHODOLOGY

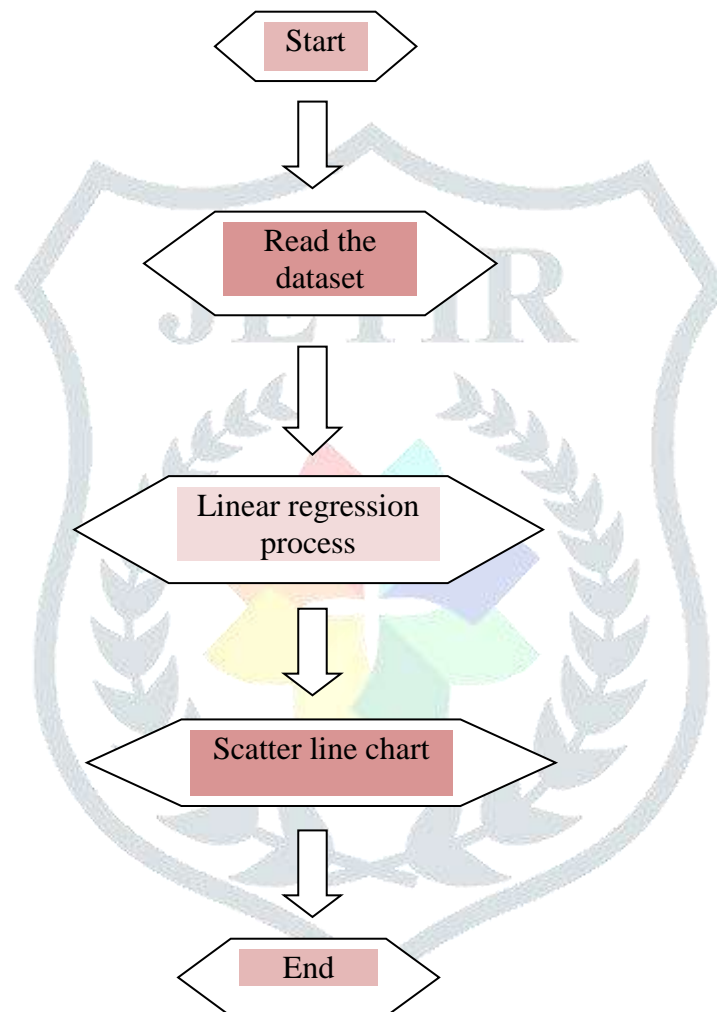
A. VISUALIZATION

Visualization is that the process of making images, diagrams, or animations to speak a message. Visualization through visual imagery has been an efficient thanks to communicate both abstract and concrete ideas since the dawn of humanity. It deals with statistical graphs.

B. LINEAR REGRESSION

Linear Regression is a machine learning algorithm. It performs a regression task. Linear regression is used to find the accuracy score of the attributes. Regression models a target prediction value supported independent variables. It is mostly used for locating out the connection between variables and forecasting. Different regression models differ supported the type of relationship between dependent and independent variables, they're considering and therefore the number of independent variables getting used.

To implement the linear regression



V. IMPLEMENTATION AND RESULT

```
plt.scatter(data['Result'],data['People_survey (%)'])
plt.xlabel("Result")
plt.ylabel("People_survey (%)")
plt.title("Ploting for people survey")
plt.grid()
```

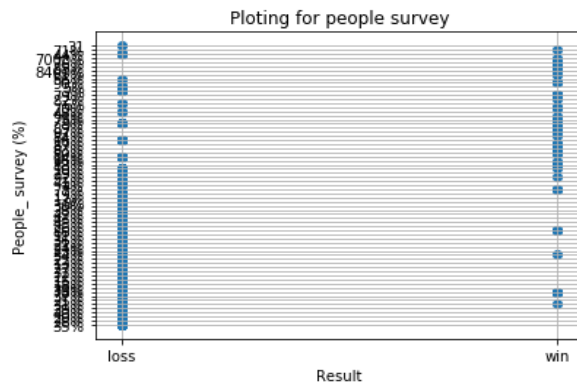


FIG 1

The Scatter plot shows that Plotting of people survey by comparing the attribute people survey and result .

```
plt.scatter(x,y)
plt.plot(x,y_pred,color='red')
plt.show()
```

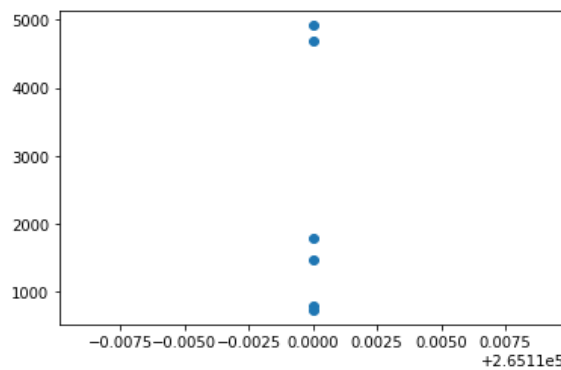


FIG 2

A scatter chart with a regression model is an excellent tool which can be used to depict the relationship between two variables in Fig 2. This shows the relationship between two variables visually.[4]

VI. CONCLUSION

In this paper, Jupyter Notebook is the tool to analyse the status of linear regression and the main objective is to perform the comparison functions. To predict the People voting rate we use People survey and Result. In plotting the data of linear regression, it shows the relationship between the two variables.

FUTHER WORK

It is suggested that the method of solution can be further extended to naive Bayes classifiers is a "probabilistic classifiers" based on applying Bayes theorem with strong independence assumptions between the features.

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