Team ID:PNT2022TMID39901
Project Name:Exploratory Analysis Of RainFallData In India For Agriculture

India is an agricultural country and secondary agro based market will be steady with a good monsoon. The economic growth of each year depends on the amount of duration of monsoon rain, bad monsoon can lead to destruction of some crops, which may result in scarcity of some agricultural products which in turn can cause food inflation, insecurity and public unrest. In our analysis we are trying to understand the behaviuor of rainfall in India over the years, by months and different subdivisions.

Agriculture is the backbone of the Indian economy. For agriculture, the most important thing is water source, i.e. rainfall. The prediction of the amount of rainfall gives alertness to farmers by knowing early they can protect their crops from rain. So, it is important to predict the rainfall accurately as much as possible. Exploration and analysis of data on rainfall over various regions of India and especially the regions where agricultural works have been done persistently in a wide range. With the help of analysis and the resultant data, future rainfall prediction for those regions using various machine learning techniques such as Regression,Linear Regression,Visualisations etc.

The main aim of objective is to find the

- Rainfall Prediction is the application of science and technology to predict the amount of rainfall over a region.
- It is important to exactly determine the rainfall for effective use of water resources, crop productivity and pre-planning of water structures.

We will use many machine learning algorithms like linear regression, logistic regression, k-nearest neighbours to predict the amount of rainfall

Linear regression tells us how many inches of rainfall we can expect.