

ZERO HUNGER

Team - The Four Coders

Arvind, Harsha, Taruni, Varun

Introduction

We the team 'The Four Coders' have selected the theme 'ZERO HUNGER' and have performed data analysis and data visualization. We aim to analyse the prices of different crops in the different areas. We have chosen 3 different datasets in order to get a better and wider view of how the yield is changing and the factors responsible for it's change.

Prompt

A complete analysis and data visualisation of the yield of different crops and the factors that affect the yield.

It constitutes of different graphs and tables to show how the data has changed through years and interconnection between them. Farmers use, depending on the natural state of climate variables, resources such as water, seeds, fertilizers, pesticides, and insecticides. The farm output is yield which is dependent on these underlying variables.

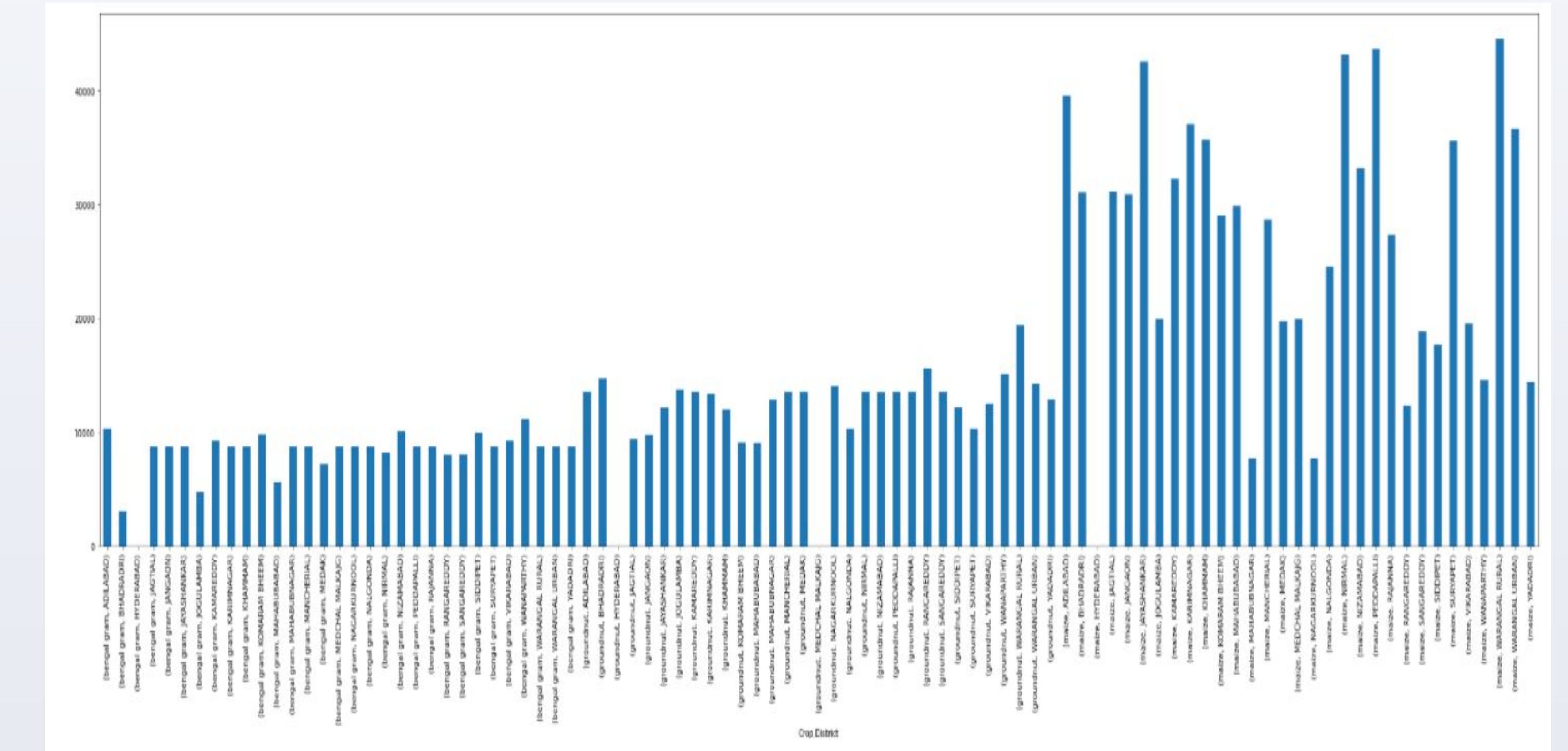
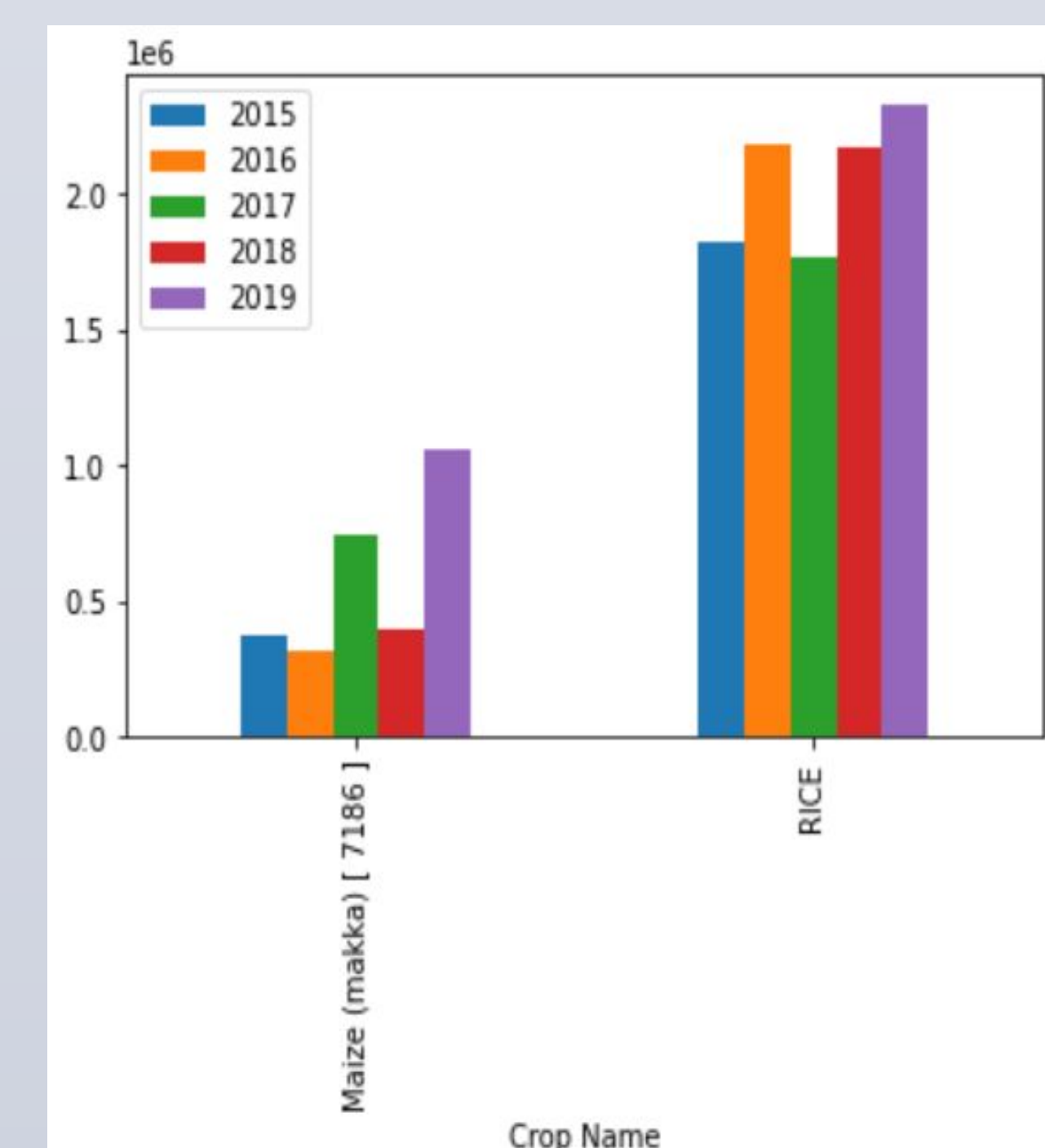
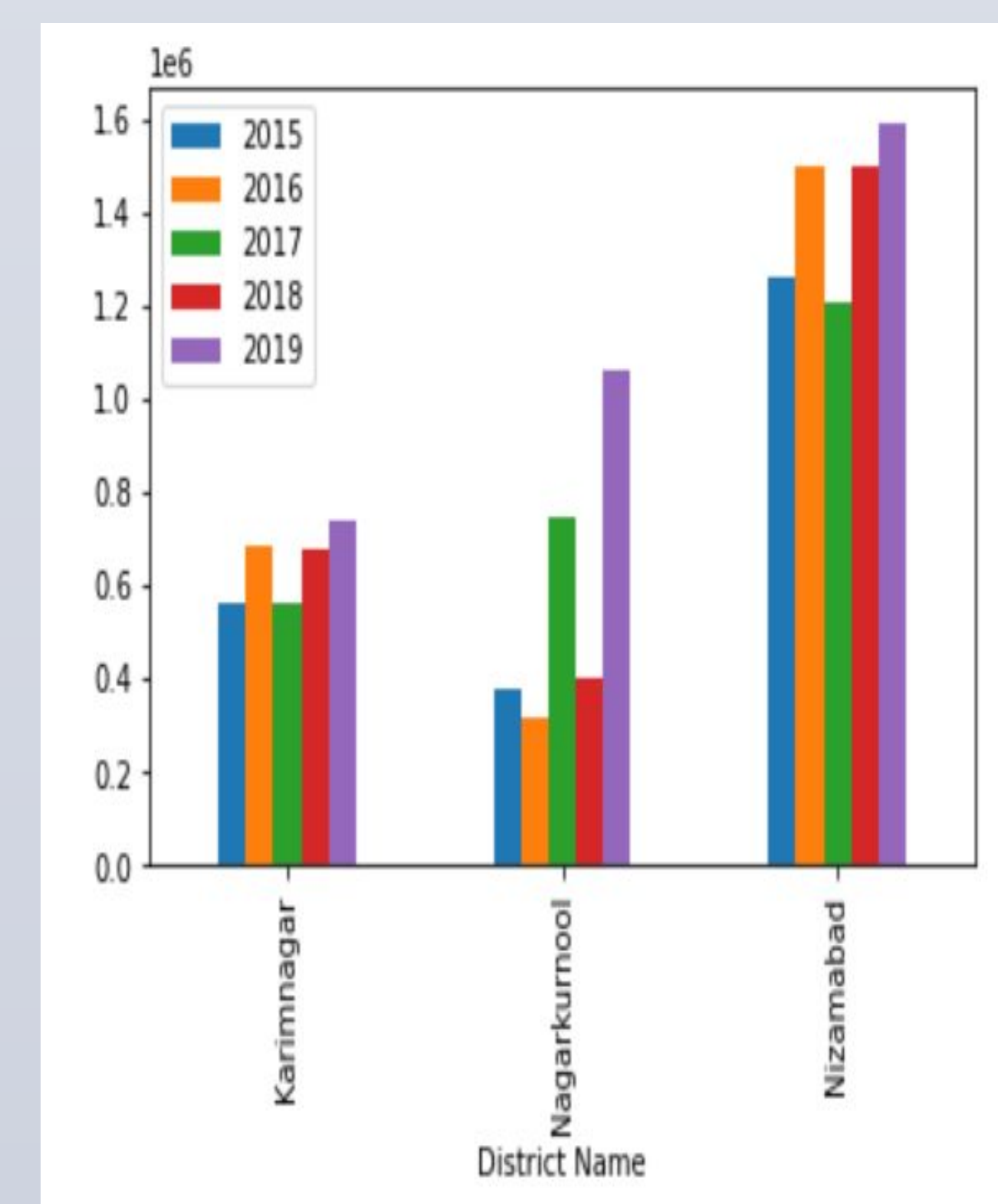
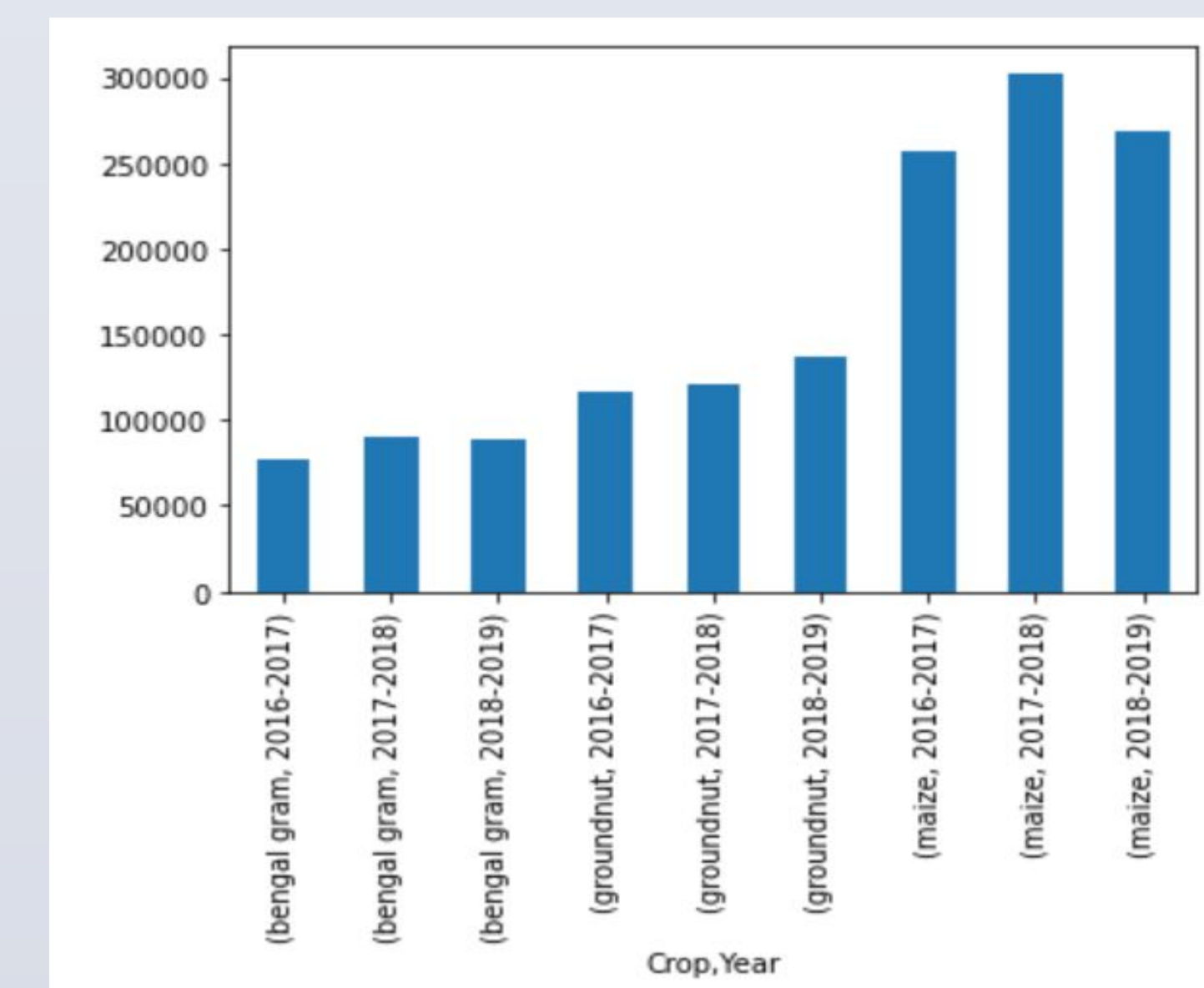
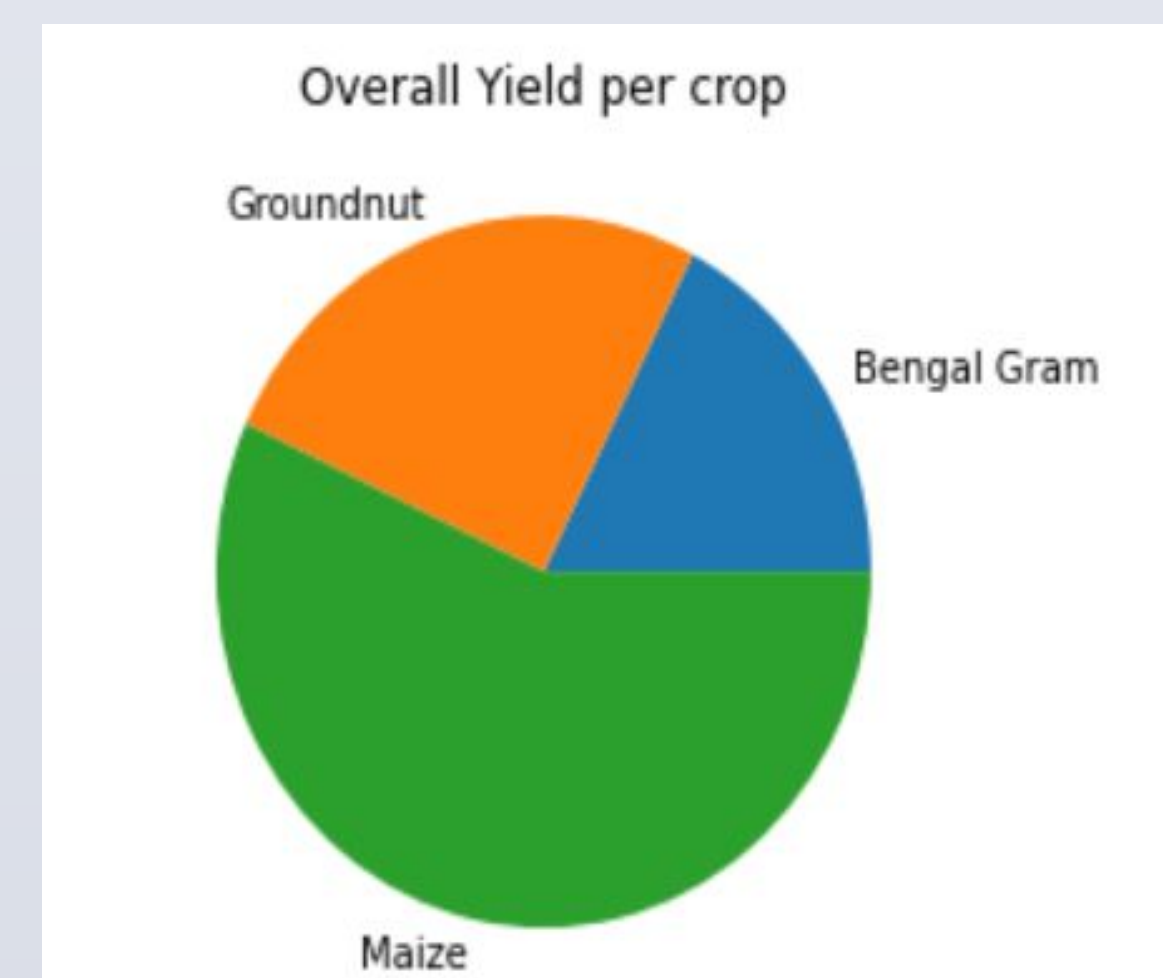
Selected Crops:

- 1.Maize
- 2.Groundnut
- 3.Bengal Gram
- 4.Rice

Methodology

All the three datasets are loaded into pandas Dataframes and analysis was done in order to get a clear idea of the crops. In spite of the limited data we had, we tried our best to find correlations and dependencies between the data. We used bar graphs and pie charts to visualise data to get a better picture of how the data is changing. We also calculated the sum, averages of the yield in different places. This gave us a chance to find out the contribution of different places to the overall yield.

Results



Conclusions

Upon analyzing the data sets and visualizing them, we have discovered that Hyderabad has no yield production of any crop. This means Hyderabad gets its crop from other districts and therefore the prices of crops in Hyderabad will only increase and never decrease. Also, we have found that the production of groundnut increased over the years. Therefore, the groundnut prices may decrease considering the availability. One more notable point is that the production of Maize has always been greater than any other crops in any place. Therefore, we can say that the price of Maize will be lesser than the others. These are few of the many inferences we have made from the datasets used.

Datasets Used

https://docs.google.com/spreadsheets/d/1UUeTeAdDiyVM3tU5RU6V_5mxd6AM_ysh/edit#gid=4627908
https://docs.google.com/spreadsheets/d/1UUeTeAdDiyVM3tU5RU6V_5mxd6AM_ysh/edit#gid=1276672012
https://docs.google.com/spreadsheets/d/16A07fteCCHcMghj8qrIttq_LGrLjCYEs/edit#gid=1617526107