DS200 : Research Methods

Module 4 : Software Tooling

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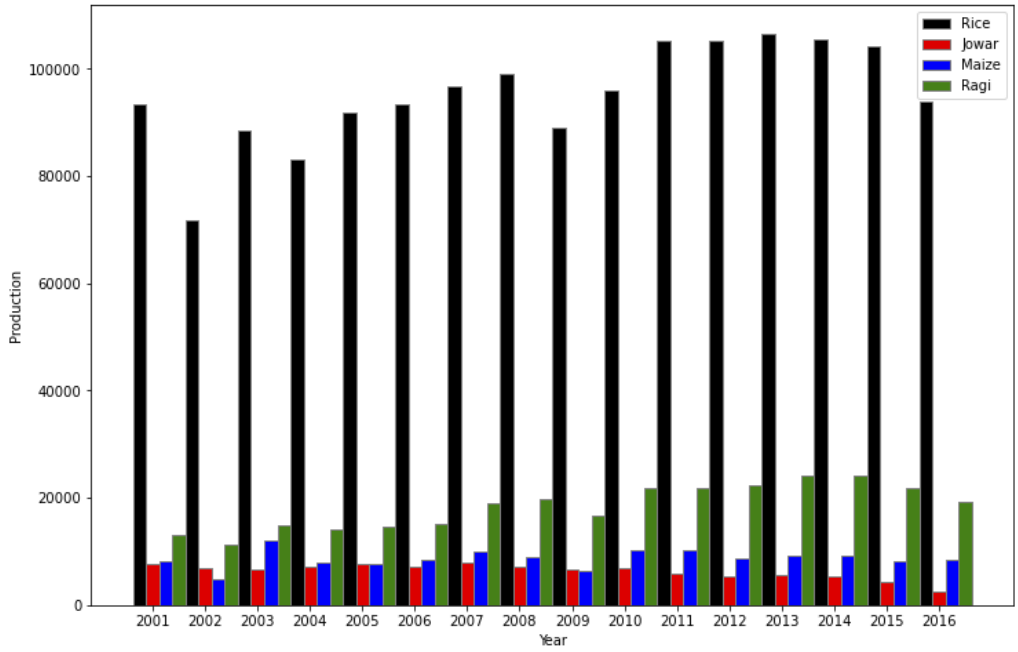
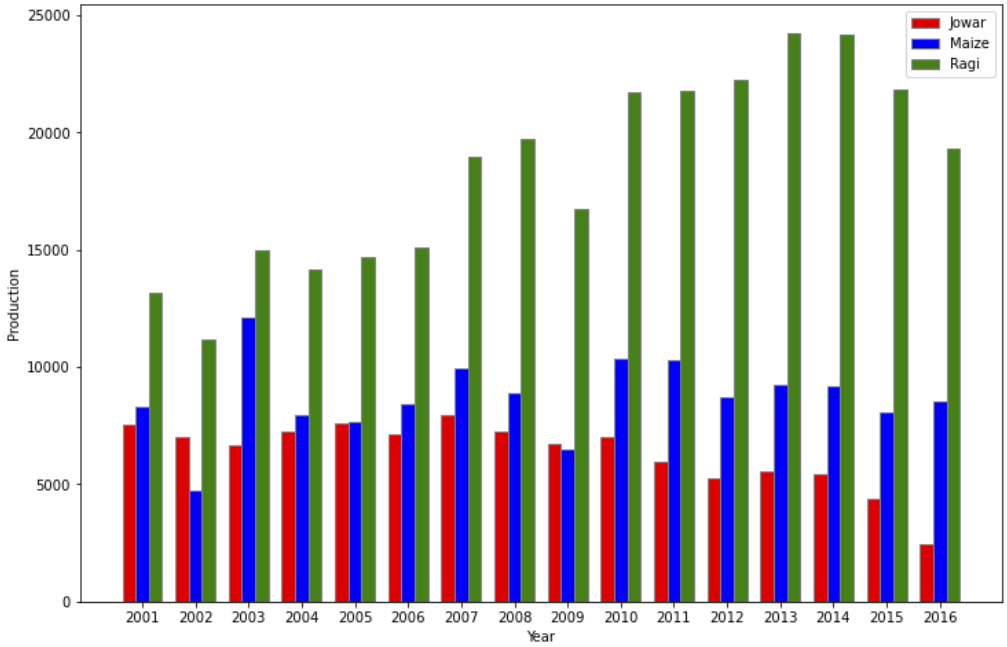
Dataset:

I have chosen agriculture data from data.gov.in. This data contains Rice, Jowar, Maize, Ragi and other crops yearly production in tons all over India from 2001 to 2016.

Dataset Link: https://data.gov.in/resources/all-india-level-production-principal-crops-2001-02-2016-17

Bar Graph:

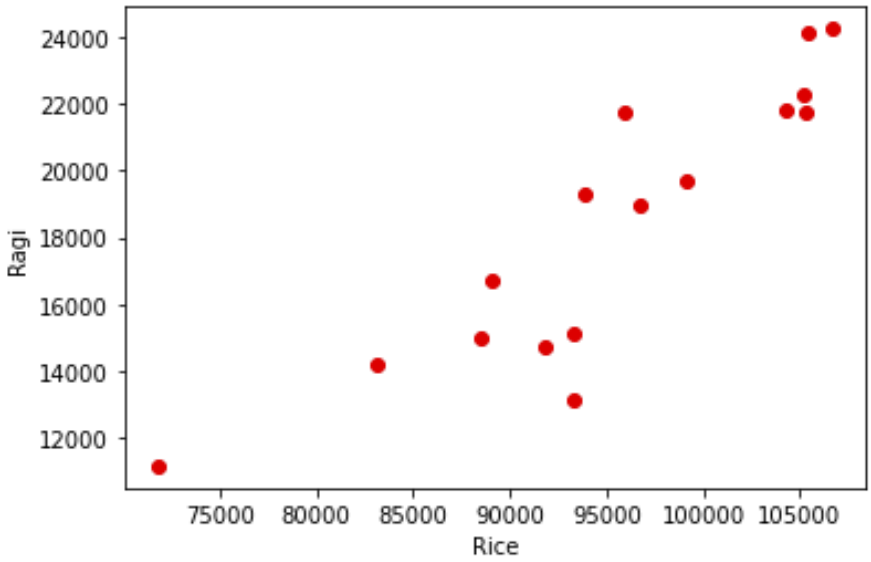




Observation:

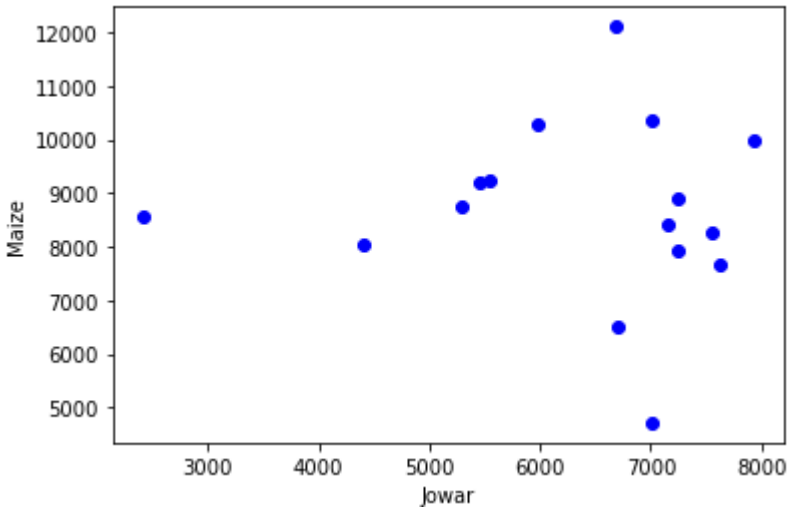
1. Rice production had been highest among the year 2001-16, and second, highest is Ragi, third highest is Maize while among these four least productions had been occurred for Jowar.
2. Rice's highest production occurred in the year 2013 and least in year 2002.
3. From, the second graph, Ragi's highest production also occurred in the year 2013 and least occur in 2002.
4. Maize's highest production occurred in the year 2003 and least in year 2002.
5. Jowar's highest production occurred in the year 2001 and least in year 2016.

Scatter Ploat :



Observation:

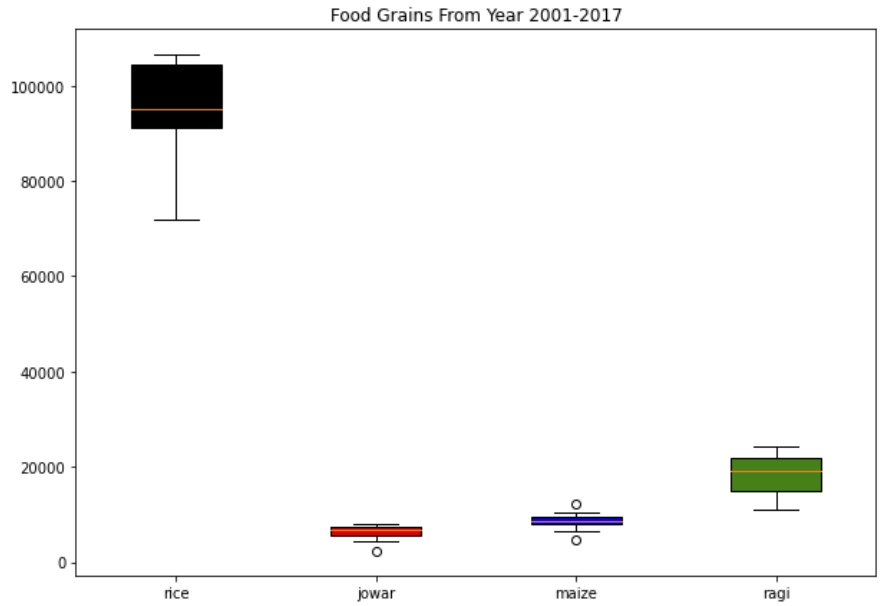
From this plot, we can say that Rice and Ragi's production has a strong correlation because in which year rice production high on that year maize production is also high while on vice versa when Rice production is less then Maize production is also less on that year.



Observation:

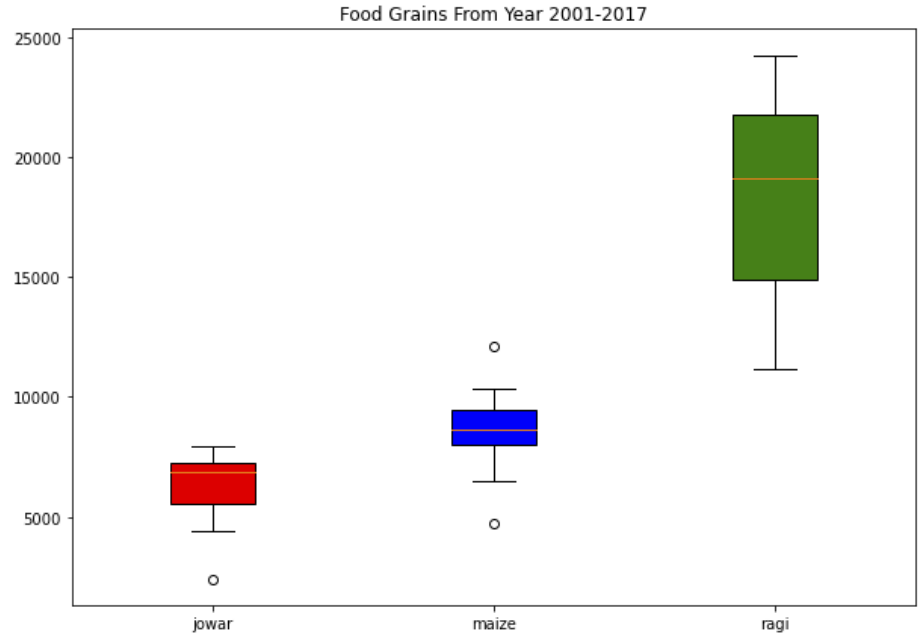
While from this ploat, we can say that there is no corelation between Jowar and Maize production.

Box Plot:



Observation:

1. From this plot also we can arrive at the same conclusion that Rice production had been highest among these years and its production is not stable over the years there is variation in production.



Observation:

1. From the above plot, we can say that Maize production remains stable throughout the year and has the least variation.