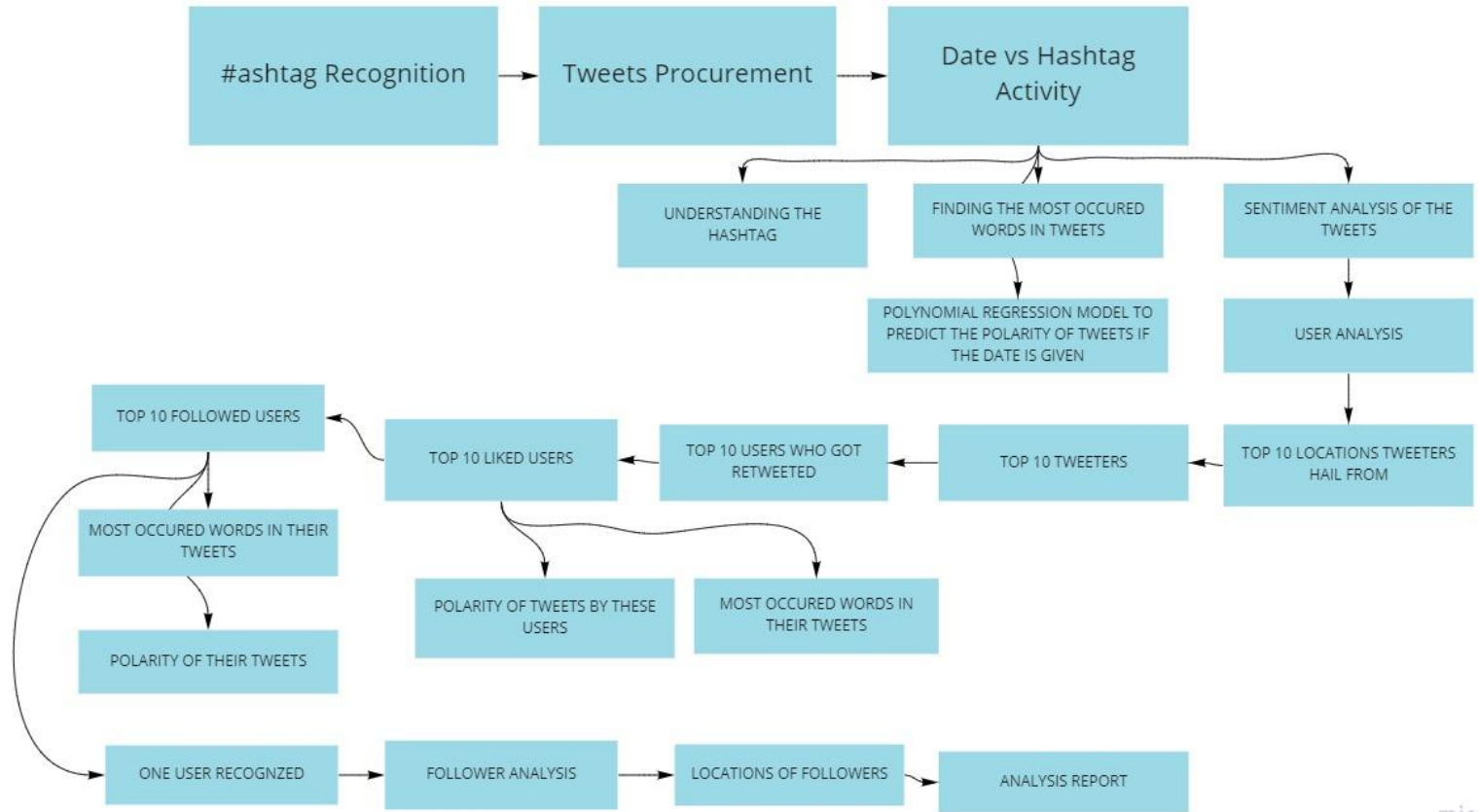


Task-II

Tweet Analysis



Hashtag Recognition

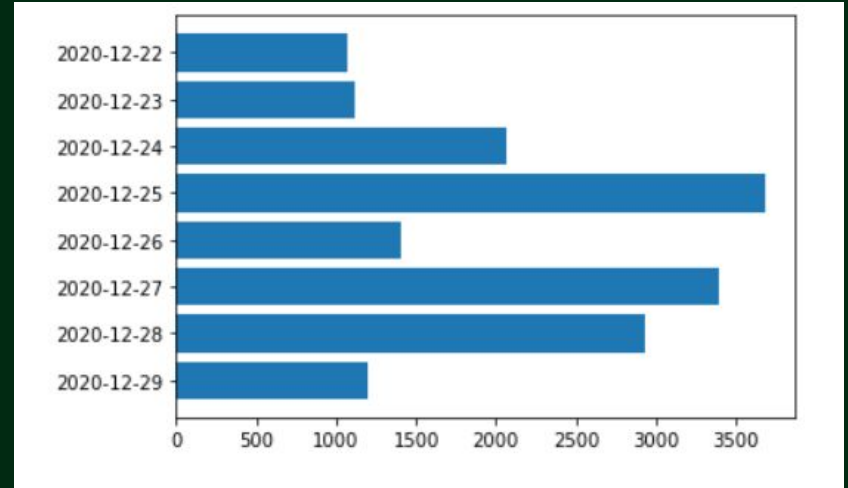
The hashtag into study is *#kisanandolan*. Considering the raising outrage against the Farm Bill 2020, I thought this hashtag can give some interesting hashtags into the Farmer's Protest.

Tweet Procurement

I made use of use Tweepy library to procure around 17000 tweets under this hashtag which range over a week long period. This decision was made to study the activity of this hashtag in a week.

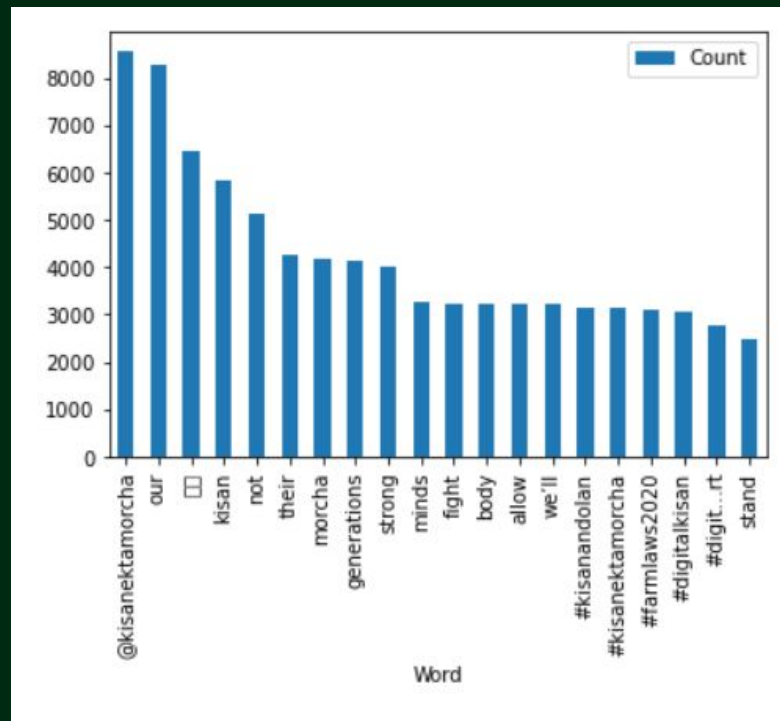
Date vs. Hashtag Activity

The obtained bar graph shows how the hashtag peaked mid week. This reflects on the dynamic attribute of this hashtag. Its a context given hashtag and hence rapid change of context resulted in rapid change in activity.



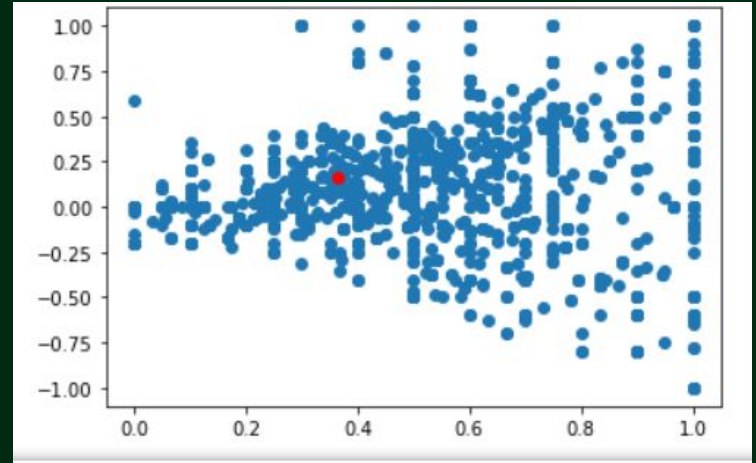
Finding Most Occured Words

This graph gives a deeper insight into the meaning and relevance of the hashtag. We can easily know what a tweeter tweeting this hashtag is concerned with.



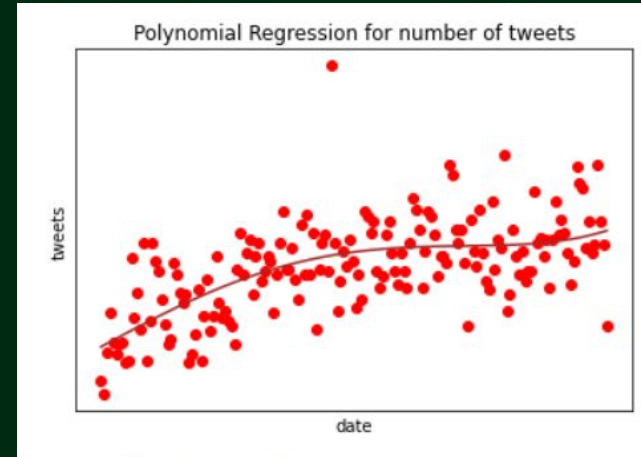
Sentiment Analysis of tweets

This is a scatter plot of polarity vs subjectivity of the tweets. The red mark is the mean of polarity subjectivity. It can be seen that most tweets are positive in polarity and also highly subjective.



Polynomial Regression Model

I built a polynomial regression model to predict the polarity of a tweet if we provide the date. The date is taken as a number and to test a numerical value can be inputted.



Understanding the Hashtag

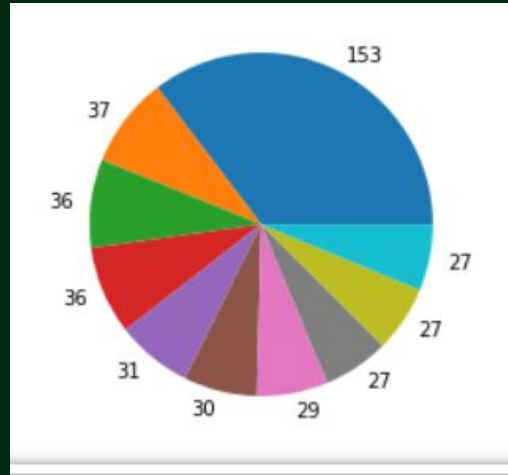
User Analysis

I tried to procure different user trends for this hashtag. This graph shows us top 10 locations the tweeters hail from. This shows how this hashtag is of a national concern.



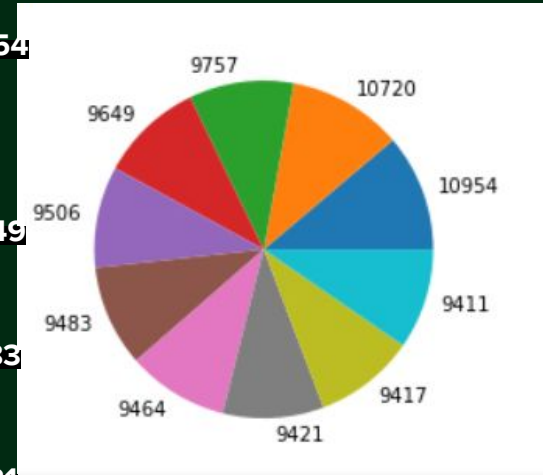
Top 10 users

AkDemocratic 153
Gi51886027 37
HarenderSinghD1 36
PVenkatGandhi 36
KuldeepDhanga17 31
JatinderTweets 30
KaurDosanjh1979 29
AmritPa28182660 27
kisanSMunion 27
Tejas0004 27



Top 10 retweeted

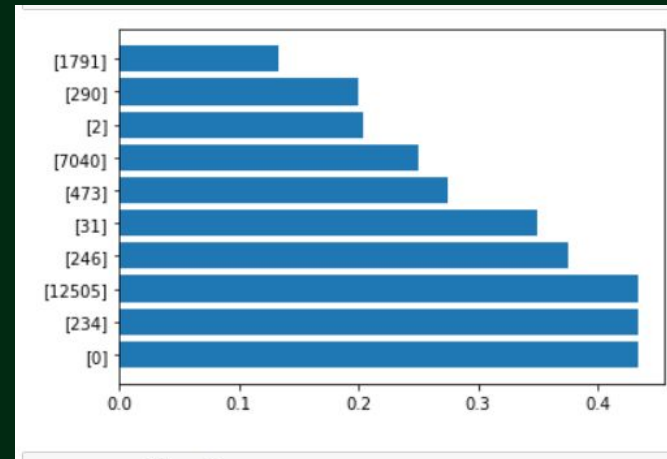
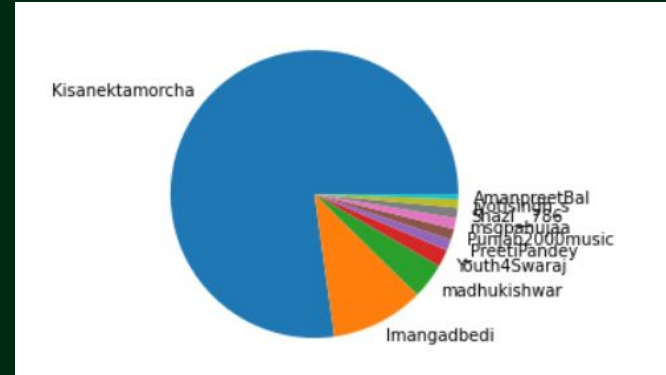
KaurDosanjh1979 10954
Bains1313 10720
Rajriarhughes 9757
Gurchar90363727 9649
AkshayUjjwal14 9506
Harpreet14785730 9483
Bal11427353 9464
StandUp4Farmers 9421
Ashugarg235 9417
Santhoshpaliath 9411



Detailed User Analysis

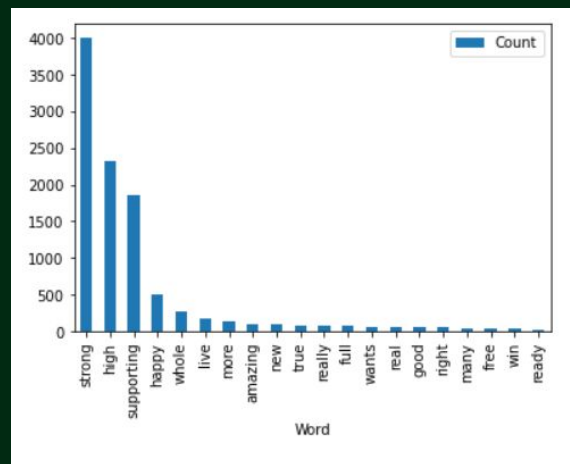
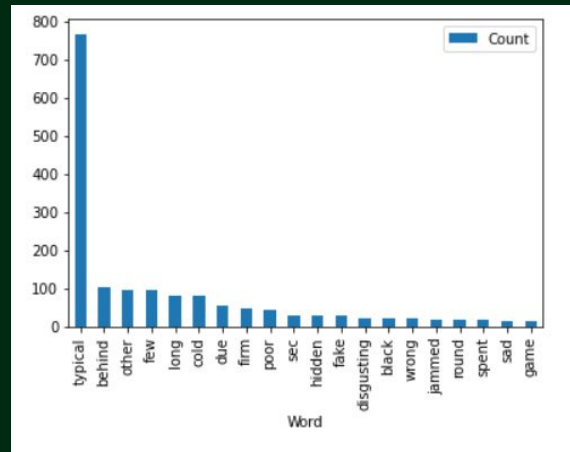
To get a better idea of how users interact with this hashtag, I plotted the polarity and most occurred words in tweets by top 10 liked tweeters.

This graph shows how top 10 liked tweets have positive polarity. I.e. people like positive tweets.

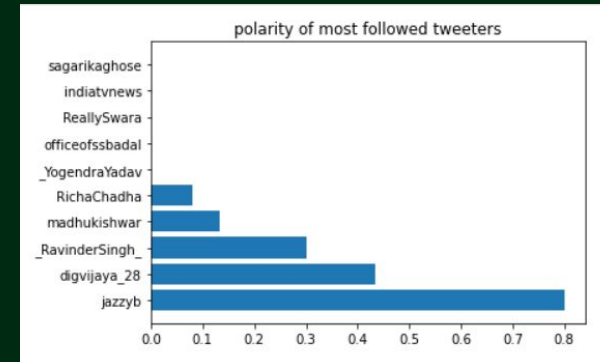
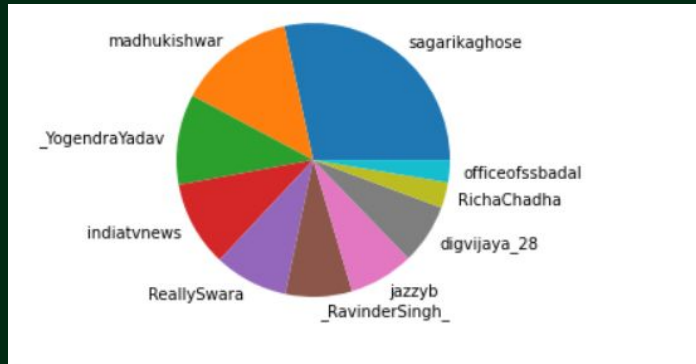


Polarity

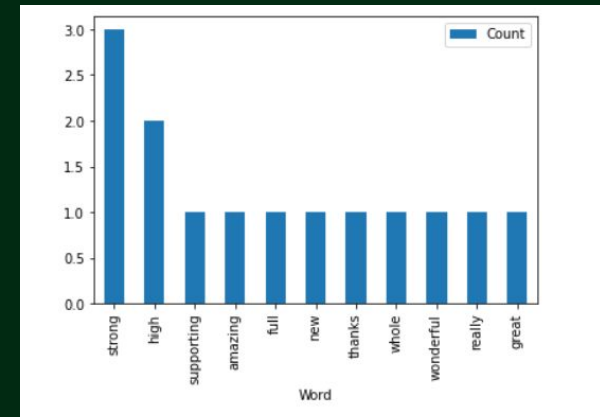
These graphs are of most occurred words in positive and negative tweets. We can see the positive tweets graph shows how people stand strong for the hashtag. Whereas negative tweet graph has expressions which seems to be attacking some authorities.



Similarly, for 10 most followed

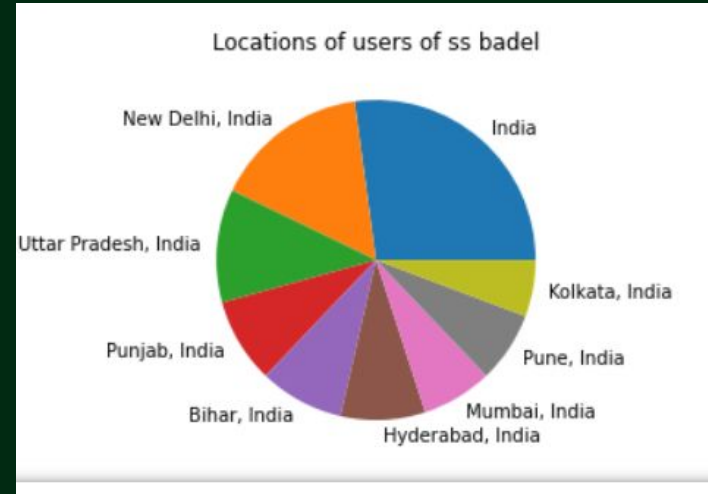


Similar analysis for most followed tweeters.



Followers analysis

I picked one of the top 10 most followed users named *ssbadel*. I obtained a list of his followers and plotted their locations. This helped me gather insights on how the user network expands. A user from punjab influences users from around the country and the chain goes on.



Final Report

I have concluded, from the analysis, that this hashtag is nationwide concern. Most followed tweeter under this hashtag has a following of 4.1M. This shows how very popular personalities too have endorsed the hashtag. It seems to be a movement that a lot of people stand strong with. Most tweets under it are positive and in support of it. Many which are negative are of an attacking or hating nature. It is an event driven hashtag and hence has dynamic performance.