

CLUSTERING & FITTING

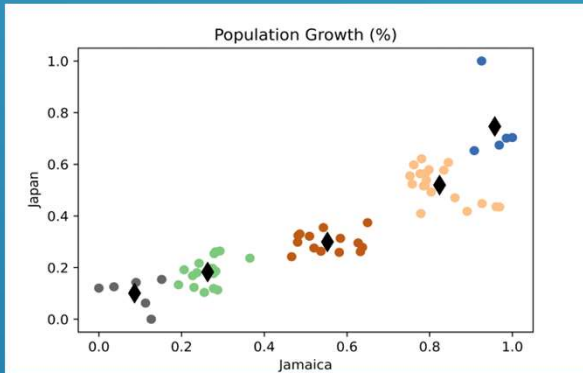
SANDEEPKUMAR MISTRY

INTRODUCTION

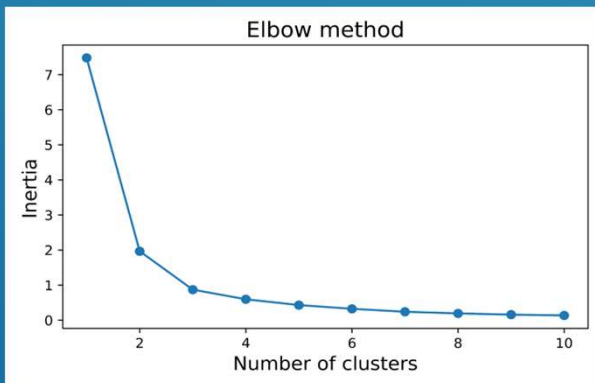
This poster represents the information of clustering process of population growth of two country. Moreover also gives a brief idea of curve fitting of GDP growth and future prediction of it.

CLUSTERING

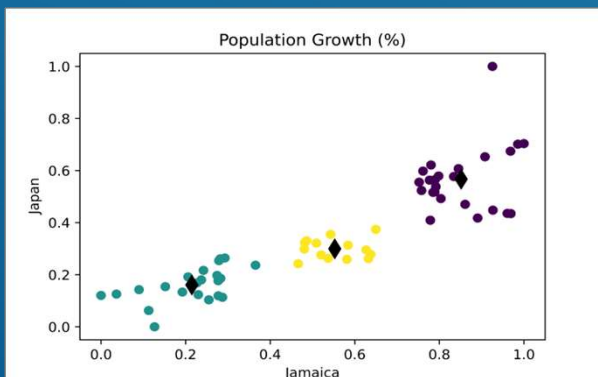
- In below graph two country shows there population growth from 1960 to 2020. This two country are Jamaica and Japan. And we can easily show in the clusters in graph are separates with each other by their similarities.



- We can found the number of clusters by elbow method and silhouette score method. Below Elbow method graph giving a correct no. of clusters.

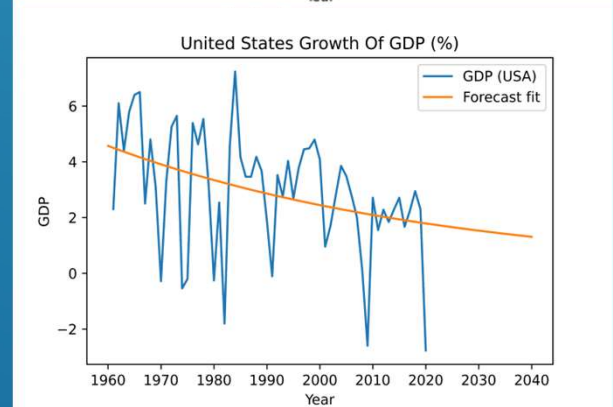
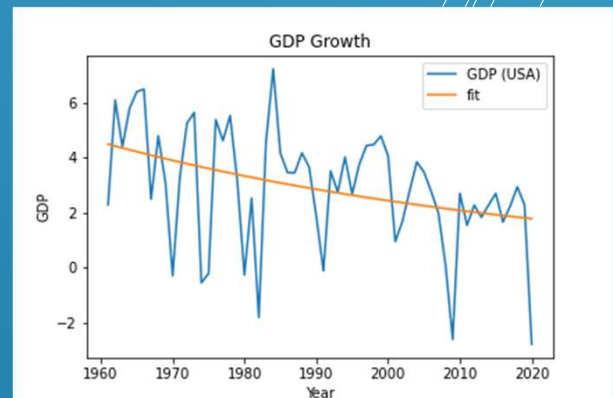


- Elbow graph turning point is 3 . That is why we choose three clusters. Before creating cluster we used normalization method to get proper cluster member and K-means.



CURVE FITTING

- This following curve fitting graph is about the GDP growth of United States country.
- This graph represents the changes of GDP from 1960 to 2020. and curve fitting is useful for fit a model line accordingly data.
- It is exponential function fitting. This fitting line is helpful to forecast the future trend of GDP.
- Here we can see that next 20 year GDP growth which is downward trend.
- Moreover it can be helpful to take advance actions and strategies for positive and better results.



CONCLUSION :-

- From this clustering we can find similar group of unlabelled or unsupervised data and classify them.
- Curve fitting is helpful to forecasting and prediction of different entities.