

# Applied Data Science 1 Assignment 3: Clustering and fitting

## Introduction

- It's a presentation about processes and relevant outputs through clustering and fitting methods. This poster mainly depicts insights about the percentage of the population and electricity consumption from the world bank data..

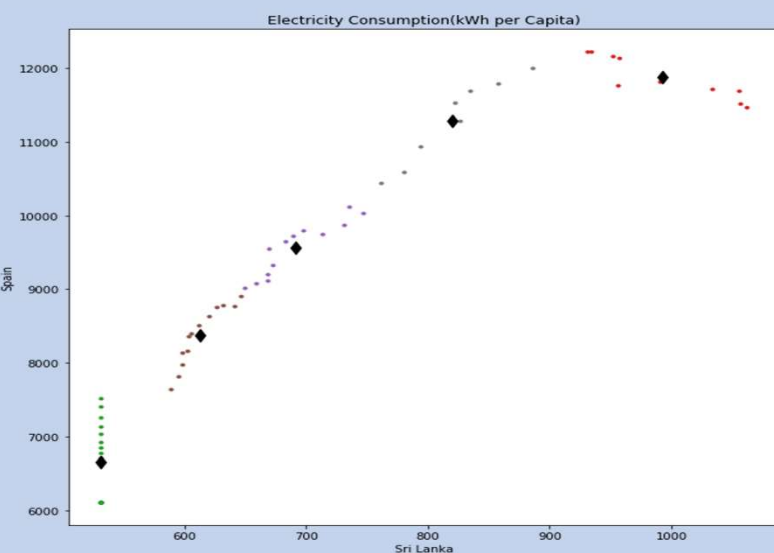
## Clustering

- In datasets containing two or more variable quantities, clustering is used to find groupings of comparable objects



<https://dimensionless.in/concept-of-cluster-analysis-in-data-science/>

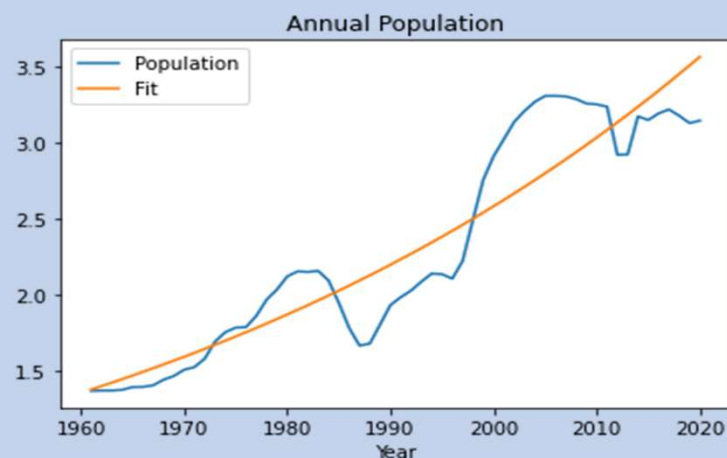
- When using a clustering technique, we may utilize clustering analysis to determine what categories the data points fit into, which could provide some useful information from our data.



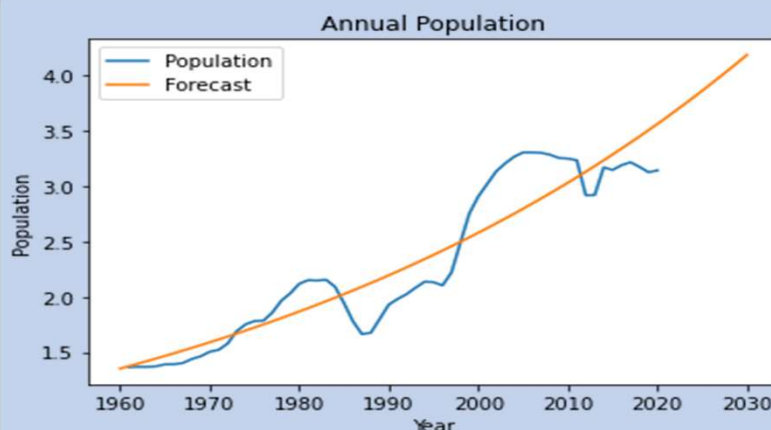
- A comparison of the simultaneous Electricity Consumption(kWh per Capita) rates in Spain and Sri Lanka countries throughout time is made. Graph depicts that highest use of Electricity Consumption is between 11K to 12K.

## Fitting

- Fitting is the process of identifying the curve that minimizes a point's vertical (y-axis) divergence from the curve.
- Datasets usually contain data that generally follow a path, but because each data point has a standard deviation, the data are scattered along the line of best fit.



- It is certain that 2003 saw the highest population and the curve fitting line shows an uptrend.



- The chart above is drawn for forecasting time gap population for the next 10 years 2020 and graph shows rising trend throughout the period of time.