**Analysis on FBI Crime Data (2016-17)**

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**PROJECT ABSTRACT**

This is a simple observational data analysis carried out on the publically available dataset by the name ‘Crime In The U.S. 2017 Preliminary Report’. The aim of the study is to figure out correlations and trends between the various attributes of the chosen dataset.

**ABOUT THE PROJECT**

* The Federal Bureau of Investigation releases a large dataset every year which contains a list of all the registered offences which have taken place in that calendar year. This dataset is publicly available on the website <https://ucr.fbi.gov/> .
* According to Wikipedia, “*Crime analysis is a law enforcement function that involves systematic analysis for identifying and analysing patterns and trends in crime and disorder. Information on patterns can help law enforcement agencies deploy resources in a more effective manner, and assist detectives in identifying and apprehending suspects*.”
* During the course of the observational study , various trends in the dataset were found . These trends and relations were expressed using graphs.
* By the end of the project a total of 5 graphs including 2 line graphs and 3 bar graphs were created , expressing between the different attributes of the dataset.
* The language used to infer results from the dataset and for data visualization was Python and its packages (Numpy , Pandas and Matplotlib ).

**ABOUT THE DATASET**

* The Dataset was taken from <https://ucr.fbi.gov/> .
* It is a moderate size dataset , consisting of 474 Rows and 18 Columns.
* It includes the number of various crimes such as (Murder , Rape , Burglary , Arson , Theft ,etc.)reported in the year of 2016-2017 for 43 States of the US .
* The dataset has versatile attributes which comprise of values ranging from single digit to 6-digits.
* This dataset provides valuable insights on the crimes which took place in the USA which is visualised and shown below.
* The data available is for the various cities which are present in that state having a population > 1,00,000