# 2019 UK Elections Exploratory Data Analysis (EDA)

**Objective**: Perform exploratory data analysis on the 2019 UK elections data. Tasks are as follows.

* Download the raw data regarding the UK general election outcome.
  + **Note**: I’ll try to find links to download the data, and you are free to search on the web.
* Clean the raw data, transform into a desired structured format.
  + **Note:** Cleansing any sort of raw data involves various steps such as dropping data points with null values, standardising data types such as numbers as strings into ‘int’ or ‘float’ data types, dates time strings into Date Time objects, etc, and if you are dealing with multiple datasets, standardising them into one format (same column names)
* Note down the questions you want to pose to understand the data.
  + **Note**: This part is a bit tricky. To ask the questions, you need to understand what you are trying to achieve. In this EDA, we are analysing UK general elections data. So, the questions should be like, let’s take an example of Brentford and Isleworth (UK Parliament constituency that you are currently residing). Questions should be like:
    - We would like to know the total vote share of the Conservative and Labour (Total number of votes, and the percentage of votes w.r.t total eligible voting population)
    - We would like to compare that percentage to the national percentage vote share of both parties.
    - We would like to know vote share among the age groups such as (18-35, 35-55, 55+) for both parties, and the same metrics compared with national statistics.
    - How are all these metrics compared against previous elections .
* Producing visualisations such as plots and graphs to relay the analysis in easily digestible way.
  + **Note**: Python provides extraordinary libraries to produce visual plots and graphs, more on that later.

**Data**: Unfortunately, as the election season concluded very recently, it was very hard to get my hands on the recent 2024 elections data. But there are datasets for 2019 and previous elections. Please find the link to 2019 elections dataset - [UK General Election 2019 Results | UK General Election Data and Assets (odileeds.org)](https://ge2019.odileeds.org/)

**Google Colab**: Jupyter notebooks in Google Colab Platform are a great way to perform simple data science projects. Please find the link to this document, example notebooks, and datasets - [link](https://drive.google.com/drive/folders/1XADAVPIvp_Zb9882INy7INetyJfkMgYP?usp=drive_link)