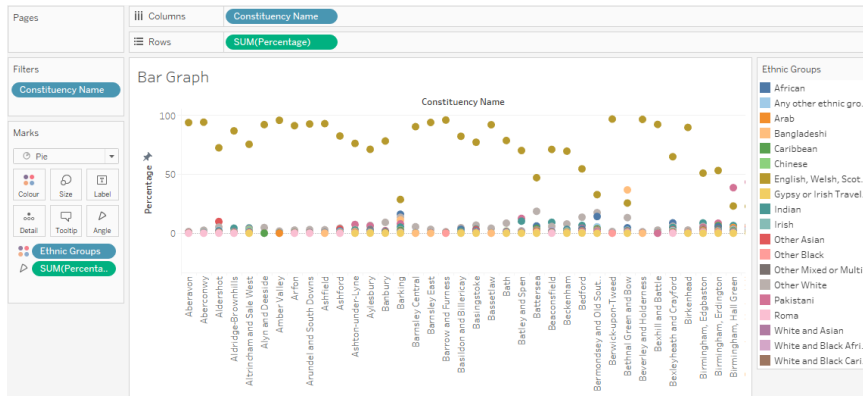


Data Visualization

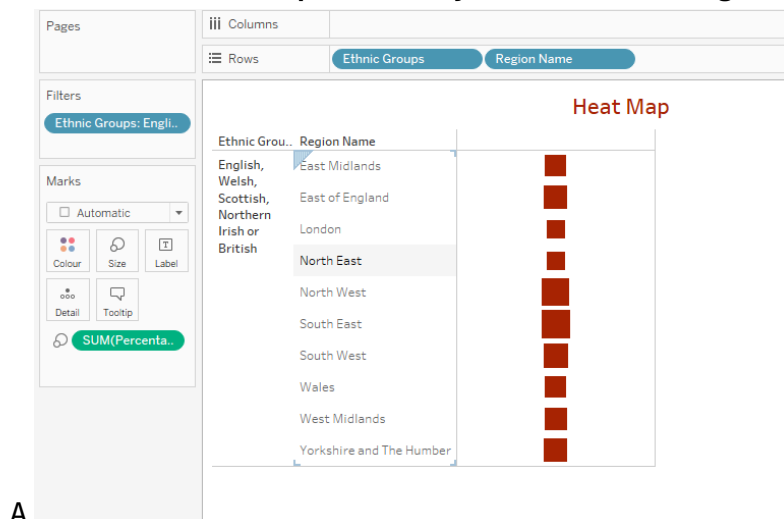
I have analysed, cleaned and prepared the data set before I started visualizing it. I have inserted columns in excel to complete the data set as it had missing information.

1. What is the ethnic composition of each constituency?

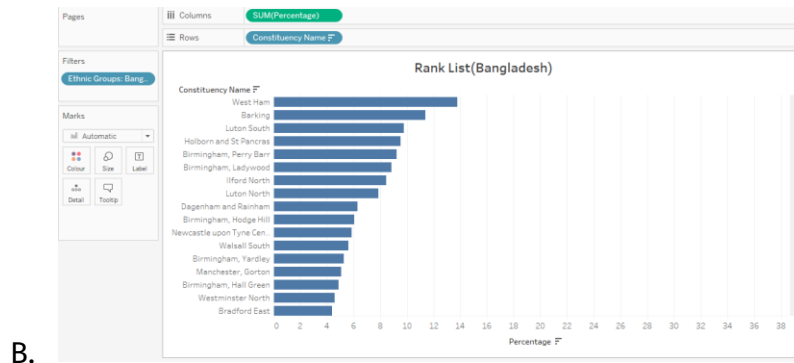


Above I have prepared and cleaned the data set to show the ethnic composition of each constituency visualised in a bar graph.

2. How does ethnic composition vary across different regions?



A.



Above I have compared the distribution of broad ethnic groups (English, Welsh, Scottish, Northern, Irish or British) visualised in a heat map for question A, and for B I created a ranked list focusing on Bangladesh.

3. How do regional and national percentages of ethnic groups compare to constituency percentages?



Above I have created a scatter plot displaying national percentages of ethnic groups compared to constituency percentages.

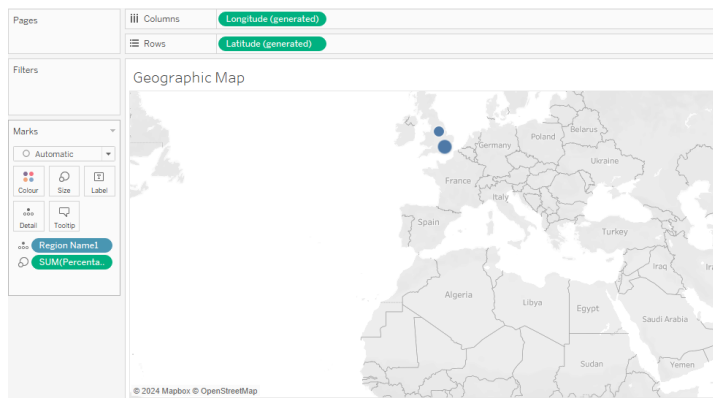
4. What are the trends in ethnic diversity over time (if historical data is available)?

Unfortunately, I couldn't recover any historical data to analyse a trend.

5. Is there a correlation between ethnic diversity and socioeconomic indicators (e.g., income, education)?

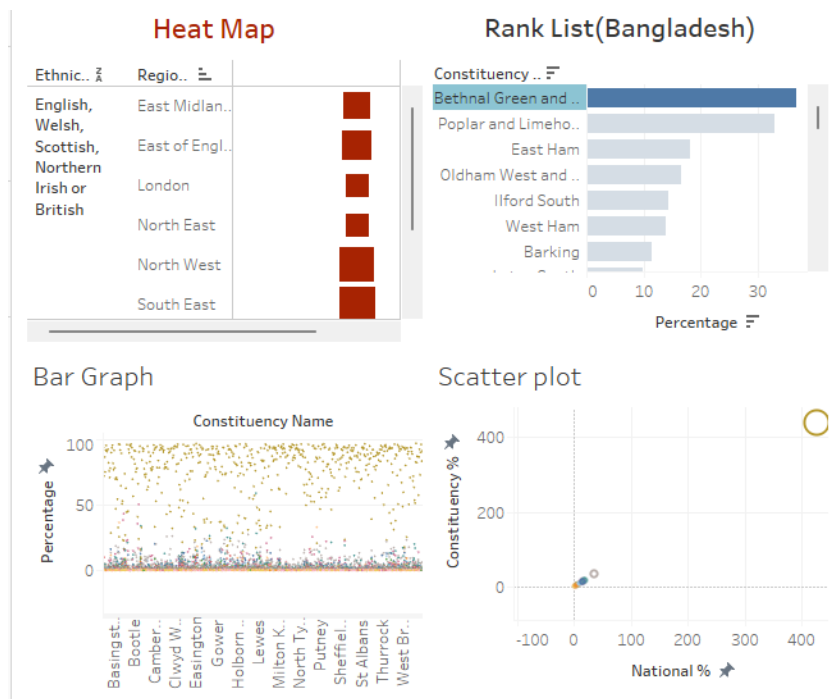
There is no correlation as there is no income or education or socioeconomic indicators in this data set.

6. How is ethnic diversity distributed geographically?



Above I have created a Geographic map displaying ethnic diversity.

7. Can we create interactive dashboards for real-time data exploration?



Above I have created a dashboard displaying visualizations that I have created on tableau. This includes a heat map, rank list, bar graph and scatter plot. These visualizations display actionable insights to policy makers.