DATA ANALYTICS FINAL PROJECT

PRESENTATION

By Georgina Ashun

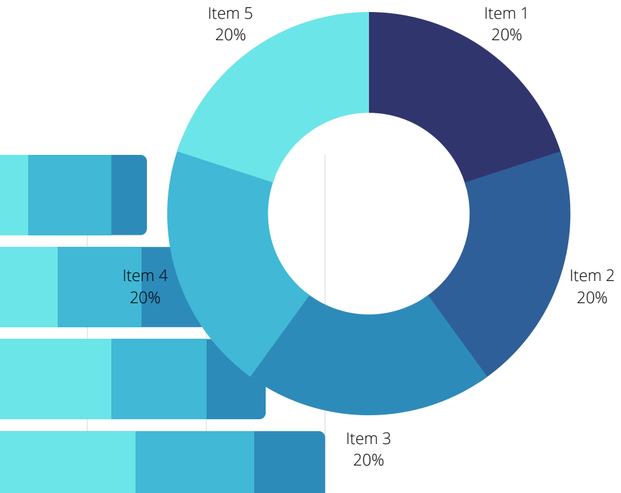
NÍ YÓ

Department for Education

BLACK DISRUPTOR ACCELERATOR

Georgina Esi Ashun

PROJECT TITLE : A LOOK INTO BREXIT



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About Me

Background, Experience and Qualifications

I have a range of work experience in data Extraction,Transformation loading , management & analysis, and have recently graduated as a full stack web developer.
My first degree was in Economics and Sociology.

Why I chose to learn Data Analytics, and what role I would like to work in following what I've learned?

Studying Economics and Sociology got me acquainted with numbers and statistics as I had to analyse data, and make economic predictions based on theories and models. Sociology involved a lot a statistical and thematic analysis to test various hypotheses to help build on social policies.

I have found the collection of data, and analysing them to draw meaningful and informative conclusions fulfilling. I wish to now work in a data analyst or data engineer role to enable me make informed data analysis, predictions and presentations to assist organisations to embark on successful ventures and solve rising issues.

Objective of Project

To analyse data from the referendum that led to Brexit

A referendum was held on the 23 June 2016 to decide whether the United Kingdom should remain a member of the European Union or leave. This project looks into Brexit to analyse findings & draw meaningful conclusions from related databases

To apply data analytic skills gained from the bootcamp

To employ the use of EXCEL, Tableau, PowerBI, SQL, Python , project management skills and agile framework learnt and attained during the bootcamp.

How I applied what I learnt in the Bootcamp?

Used functions & statistical formulas in Excel such as Sum, Average, COUNTIF, and INDEX MATCH to gather relevant statistical conclusions such as the total sum of electorates, the average of percent turnout, maximum and minimum percent turnout, and the count of areas that voted leave or remain.

Used MySQL to run queries on the data and to create joins on the census and the referendum data. Also created new tables using CASE WHEN , for example to show whether an area voted LEAVE or REMAIN. All of these enabled me to analyse the data and answer questions such as which top 5 areas voted LEAVE .

Finally, Used power BI and Tableau to create visualisations to show the fndings . Also used Q&A in PowerBI to ask questions related to the data, and analysed the data using smart narrative to retrieve informed conclusions on the data..

MY FINDINGS

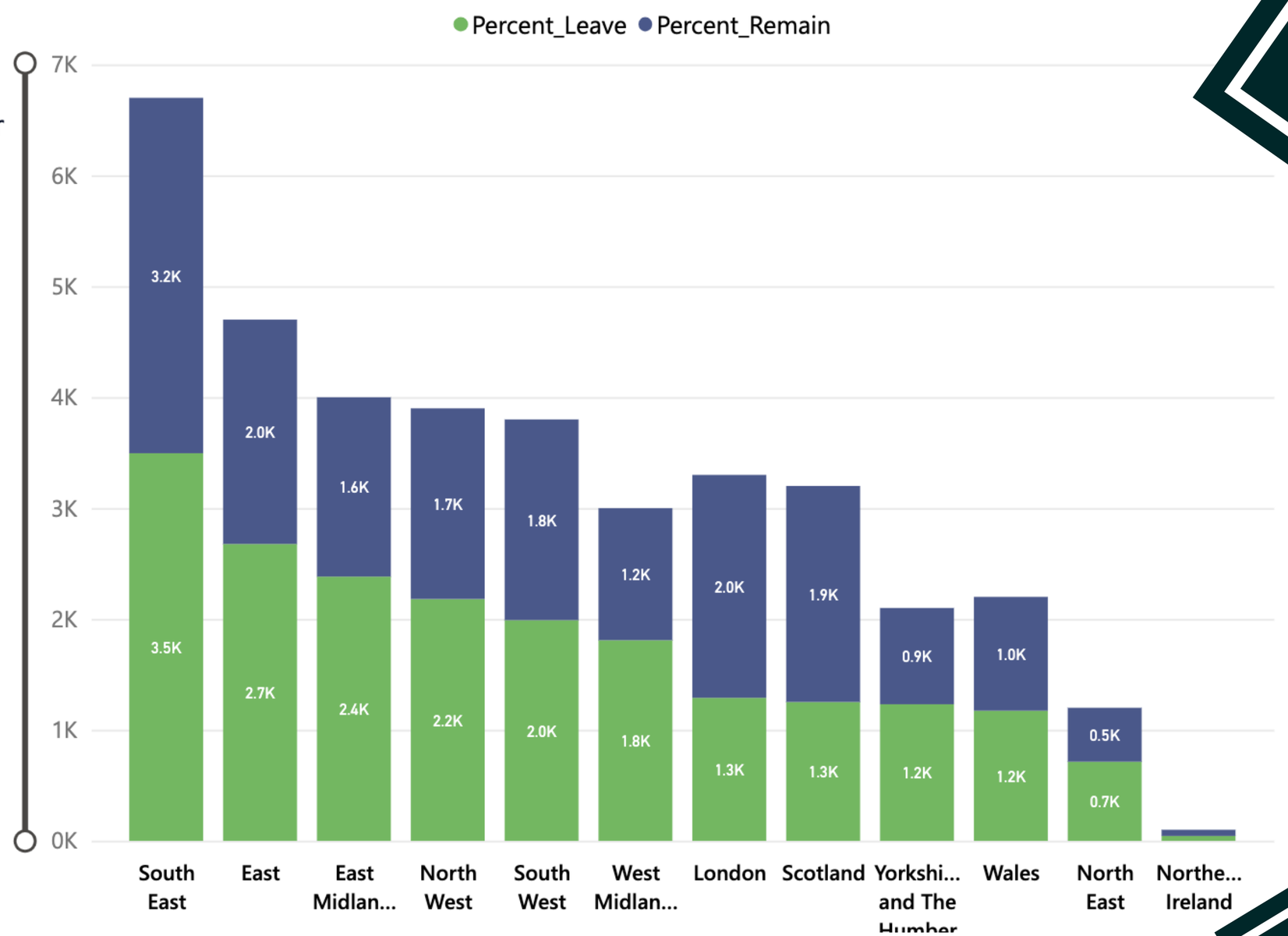
At 3,495.39, South East had the highest Percent_Leave and was 7,804.55% higher than Northern Ireland, which had the lowest Percent_Leave at 44.22.

Percent_Leave and total Percent_Remain are positively correlated with each other.

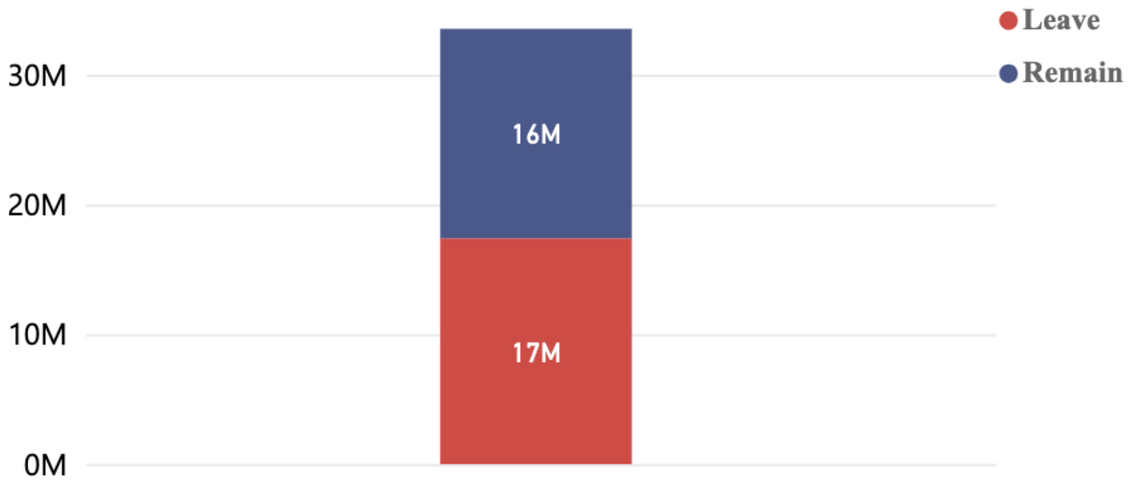
Percent_Leave and Percent_Remain diverged the most when the Region was East Midlands, when Percent_Leave were 765.96 higher than Percent_Remain.

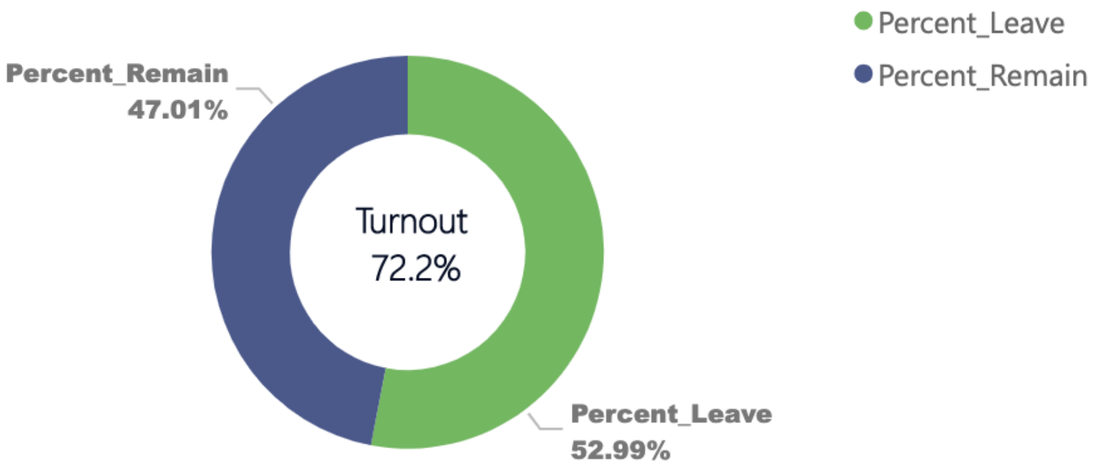
South East accounted for 17.27% of Percent_Leave.

Across all 12 Region, Percent_Leave ranged from 44.22 to 3,495.39.

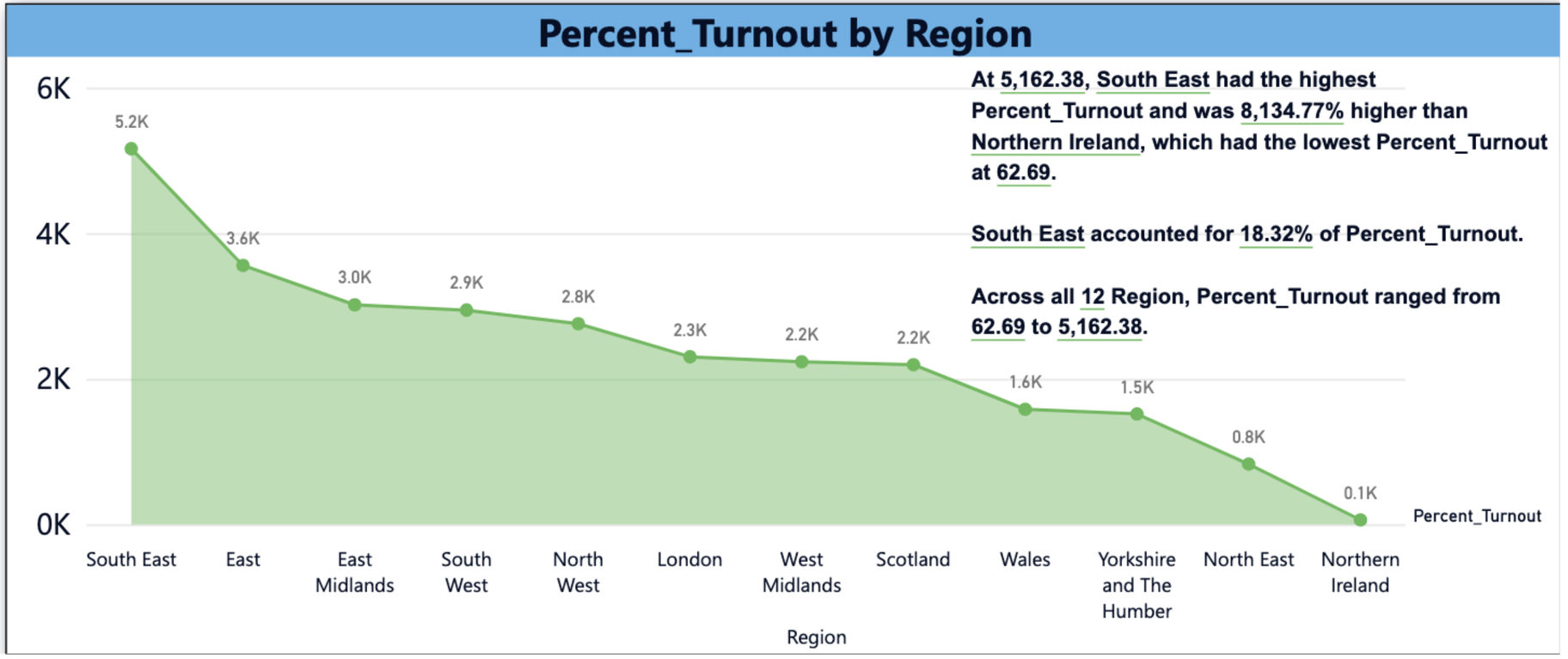


MORE FINDINGS

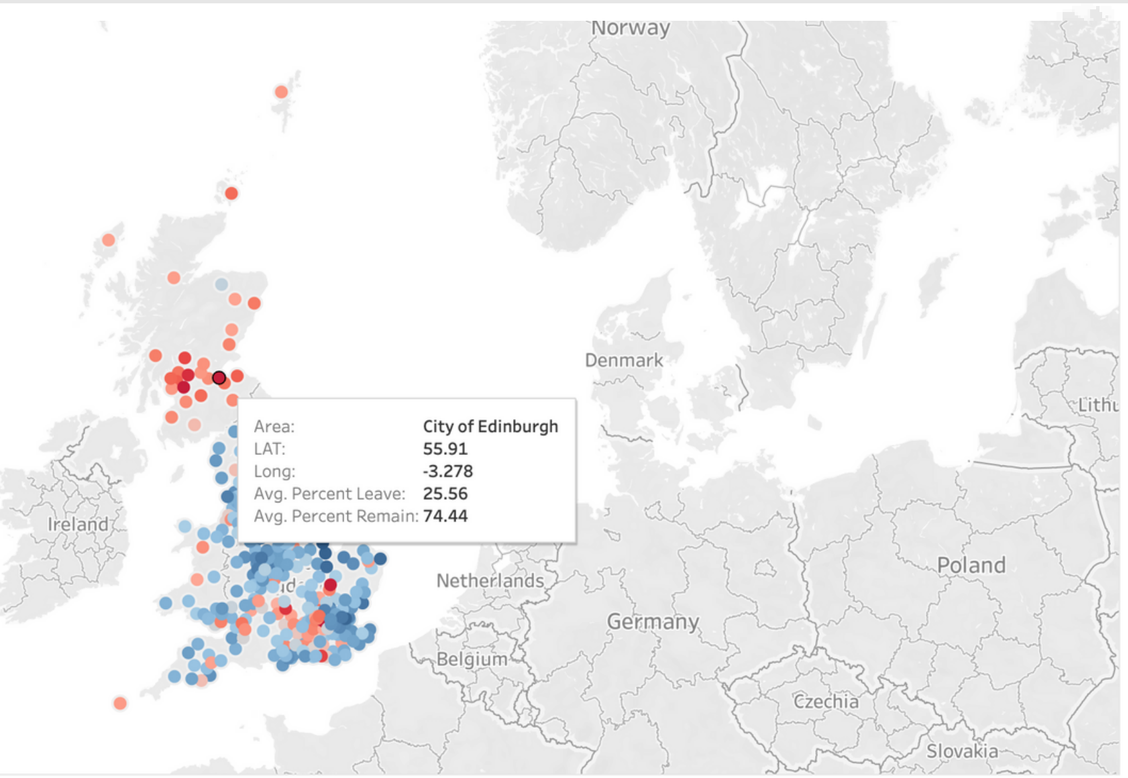


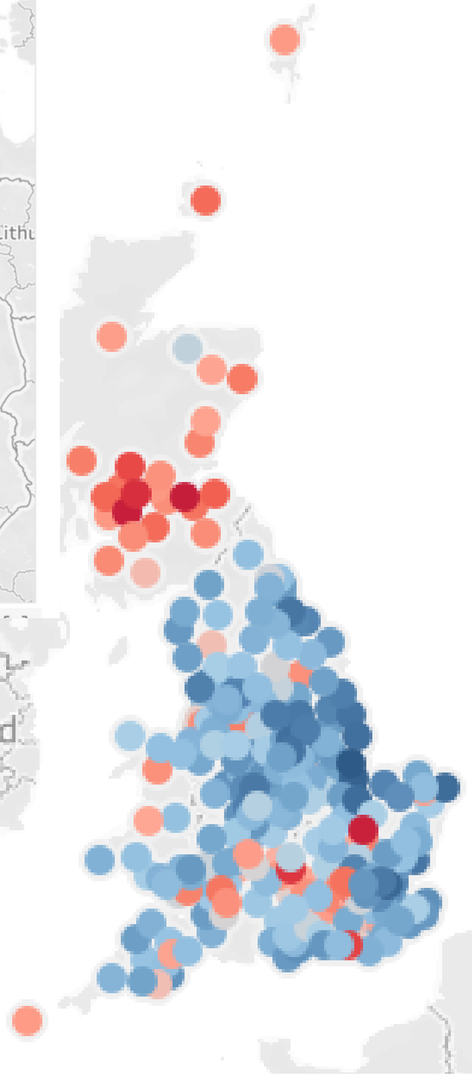


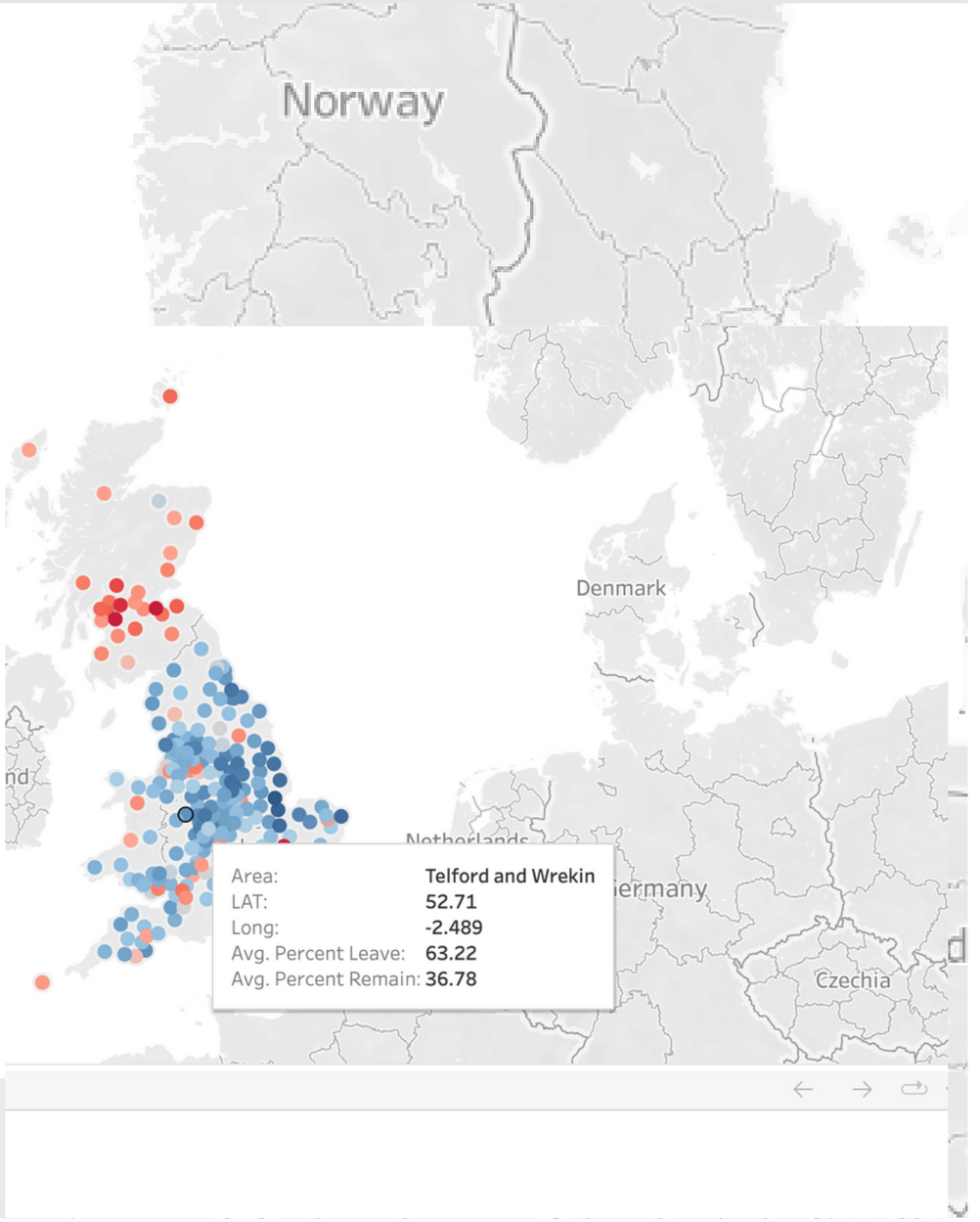
Region	Percent_Turnout
South East	5,162.38
East	3,559.86
East Midlands	3,018.09
South West	2,945.16
North West	2,758.82
London	2,303.97
West Midlands	2,236.03
Scotland	2,195.87
Wales	1,583.18
Yorkshire and The Humber	1,518.70
North East	829.57
Northern Ireland	62.69
Total	**28,174.32**



UK area MAP showing the average percent Leave and average percent Remain for BREXIT

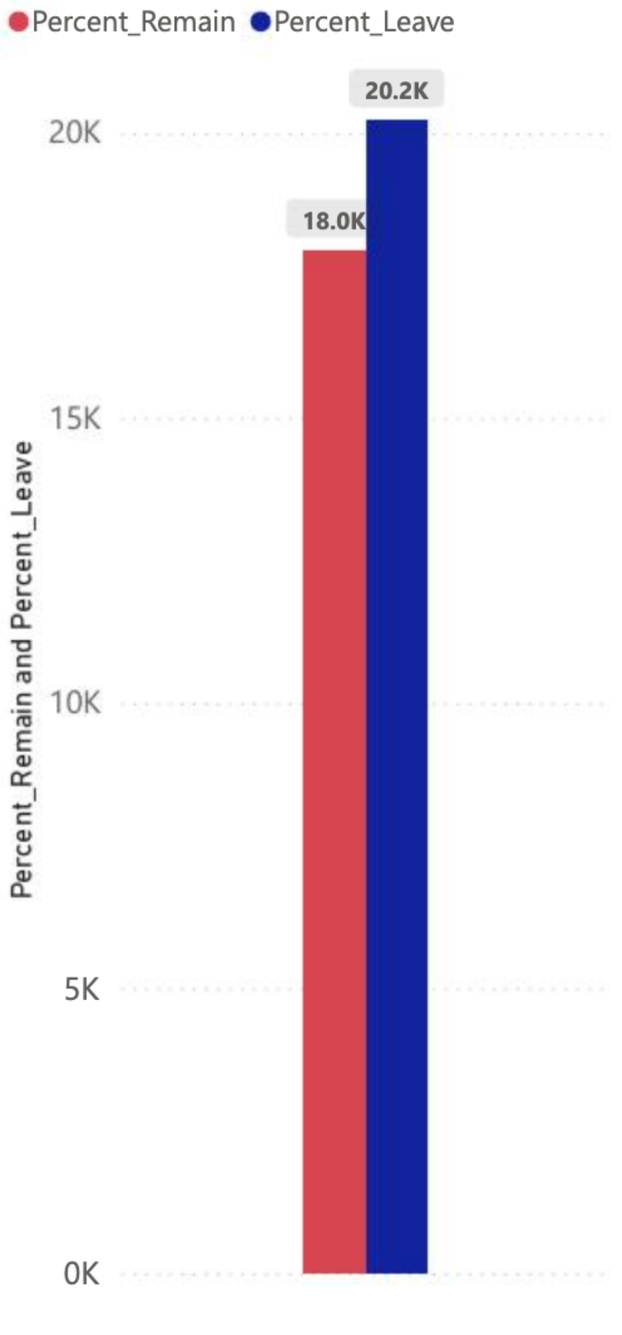




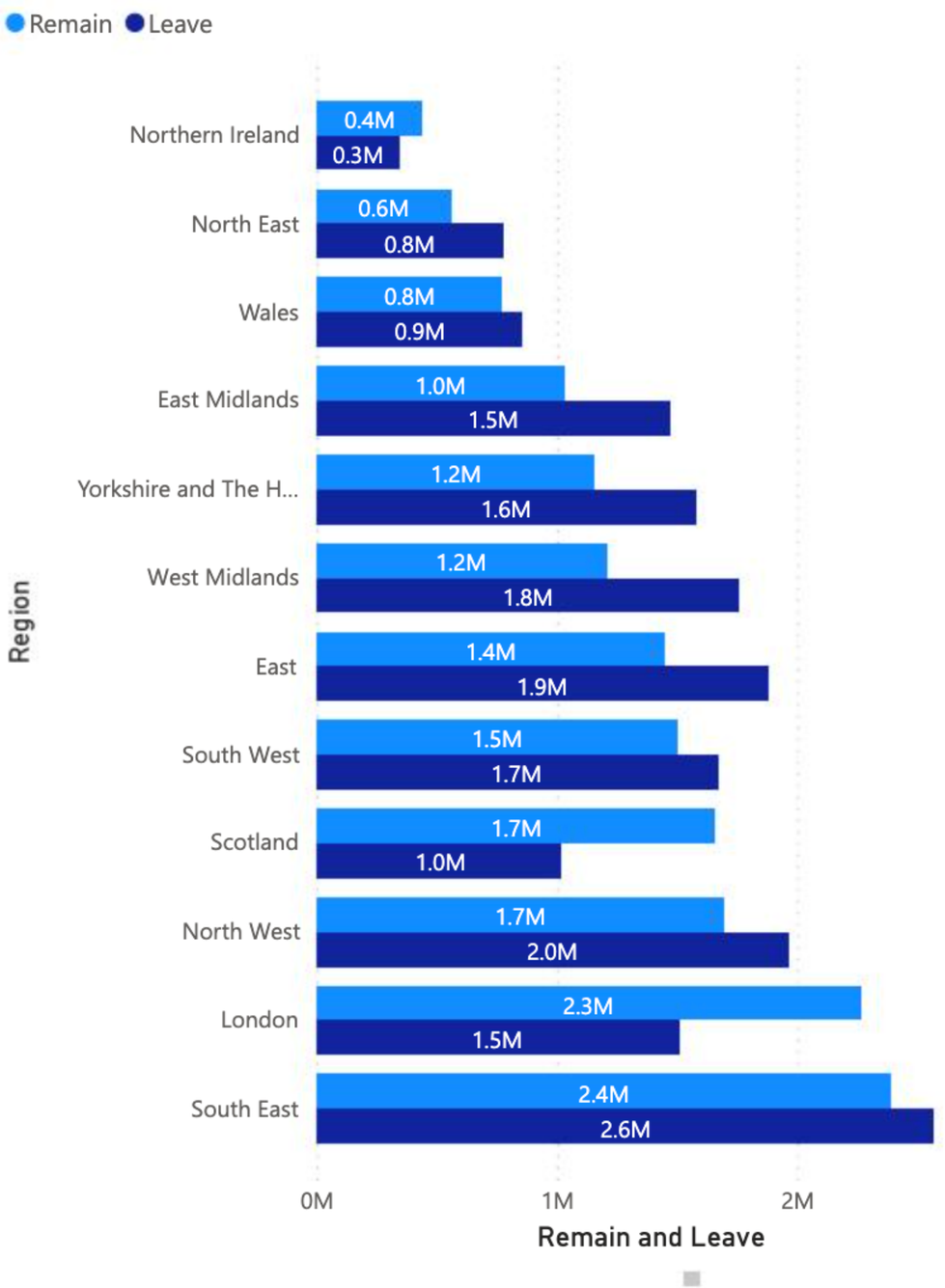


I used Tableau to create this

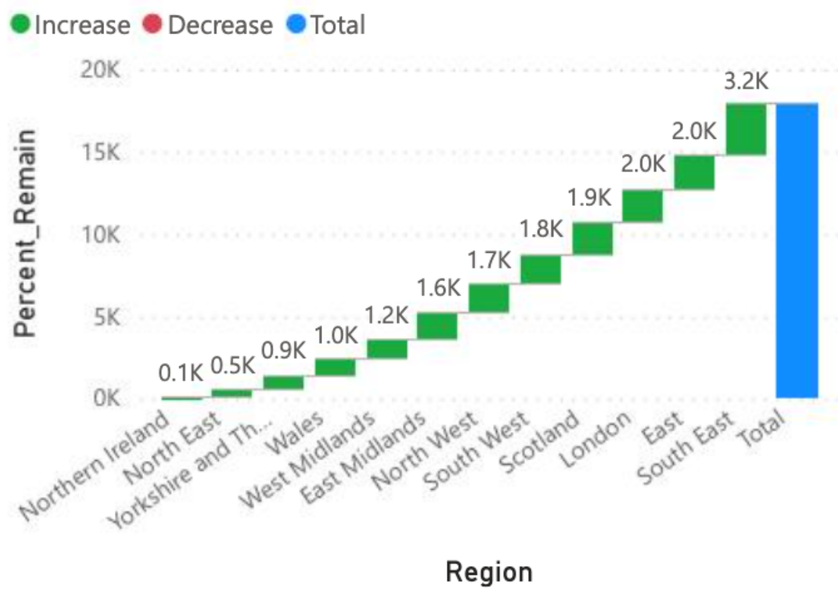
Percent_Remain and Percent_Leave



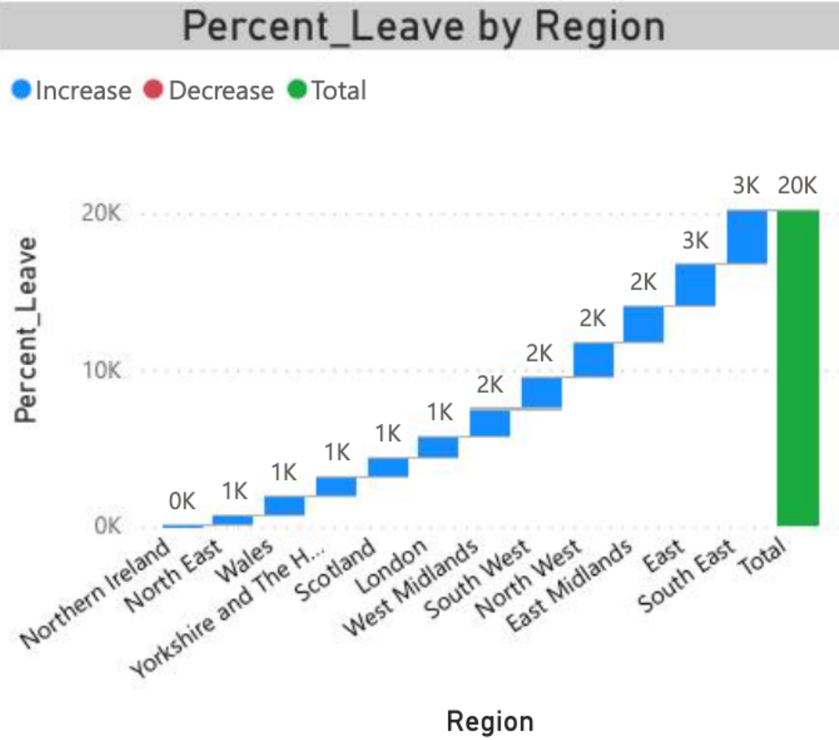
Remain and Leave by Region



Percent_Remain by Region



Percent_Leave by Region



```sql
-- I identified 'area' as what connects both tables and can therefore be joined by AREA as shown below
SELECT * FROM referendum ref
INNER JOIN census cen
ON ref.area = cen.area;

-- Exploring Joins: From the joined table, selecting each area and district type from the census table;
-- Then selecting the region, number of electorates and how many electorates voted remain or leave from the referendum table in each area

SELECT cen.area, cen.type, ref.electorate, ref.region, ref.remain, ref.leave
FROM census cen
INNER JOIN referendum ref
ON cen.area = ref.area;


-- Finding the average leave percentage and average remain percentage

SELECT
ROUND(AVG(percent_leave),2) AS 'Percentage of Leavers',
  ROUND(AVG(Percent_Remain),2) AS 'Percentage of Remainers'
FROM referendum;


-- Top five areas that supported Remain

SELECT Area, Percent_Remain
FROM referendum
WHERE  Percent_remain > Percent_Leave
ORDER BY percent_remain DESC
LIMIT 5;
```

Excerpts from MYSQL Workbench

Top 3 Things I have learnt on the bootcamp

01 Education

Advanced Excel: Macros.

Data visualisations: Excel, Tableau , PowerBI and Pandas.
CODING: Python
Project Management : Agile Waterfall.

Google Data Analytics & **Microsoft Azure Certification**

02 Personally

PersonallY, I have been highly motivated during this bootcamp. I have felt valued as an individual, and have received empowerment via the programs held for trainees.

03 career Wise

Data analytical skills: data extraction, transformation, cleaning, computation, visualisation and analysis to draw meaningful conclusions.

Learnt how to prepare CVs and to be interview ready.

On a mentoring programme with a mid-senior manager at KPMG - learning many valuable things for my career development.