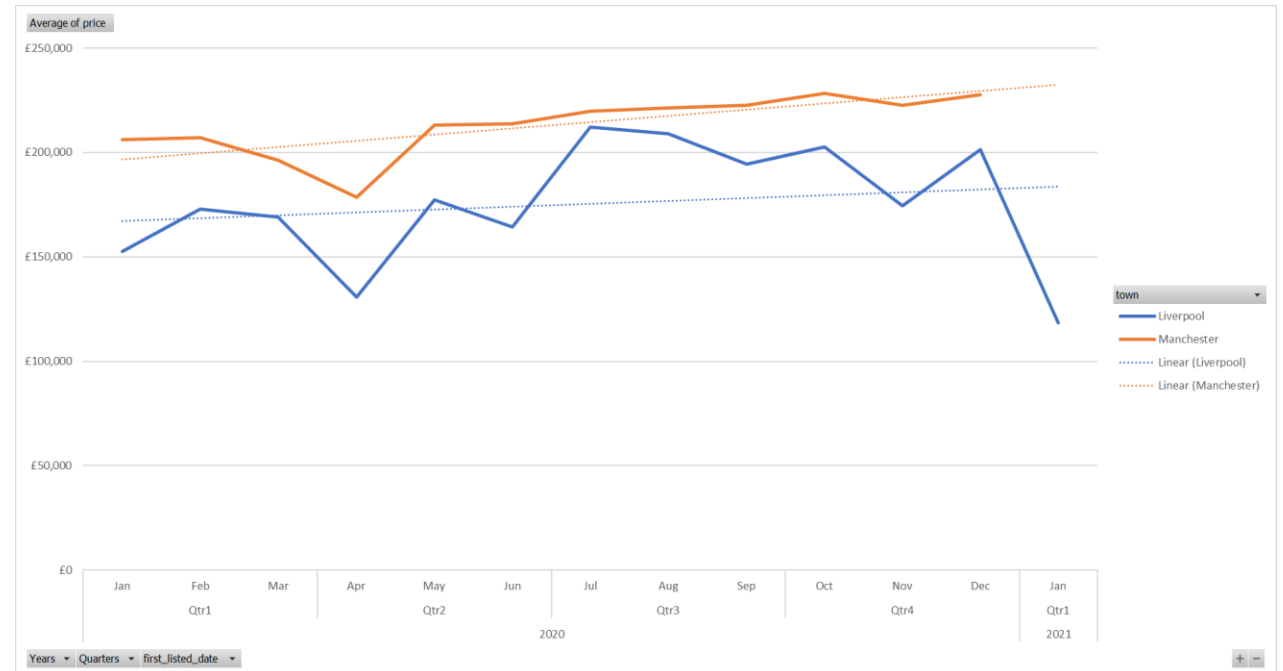# Strike Data Analysis

Yasin Hassan

Analysis Summary

Which two branches listed the highest volume of properties by town for 2020

- Tower Properties listed 1,734 properties during 2020 which is the highest total listings
- This is then followed up by Family Street with 1,556 listed properties in 2020

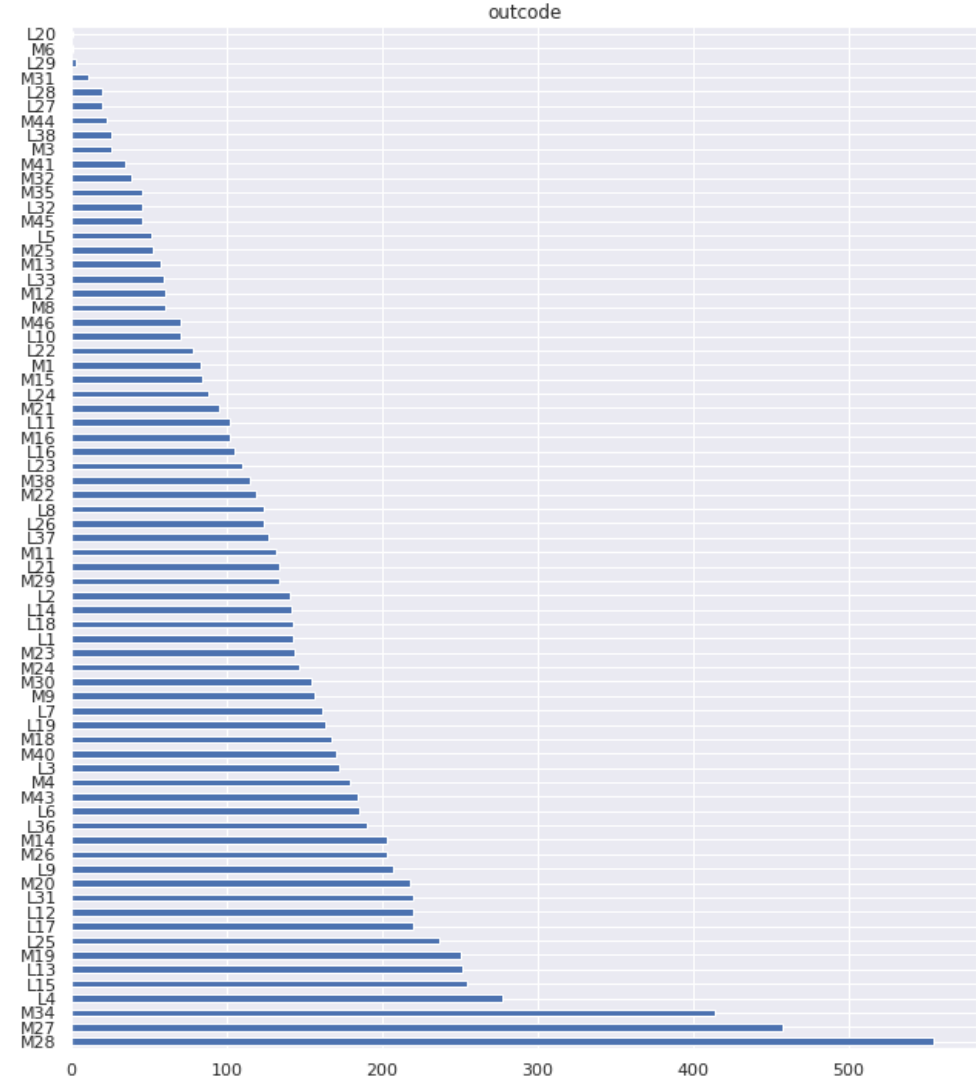| Branch Info		
branch2	Property Count	Property Count 2020
Tower Properties	1735	1734
Family Street	1556	1556
Anchor & Lime	1104	1103
Path steps	1068	1068
Property Partners	852	852
Mortar	791	791
Pulley & Stones	718	718
Proper T	663	663
Property Nest	535	535
Country Roads	429	429
Hills & Pickle	369	369
Daves Houses	215	215
Property Sherpa	153	153
Cross Country	1	1

What are the trends of average house prices by town by month?

- Here we find that the average house prices are consistently higher in Manchester than Liverpool.

- Both cities had significantly less listings between April-May which de-stabilises average prices for those months

- Manchester properties is growing at a steady but faster rate than Liverpool.

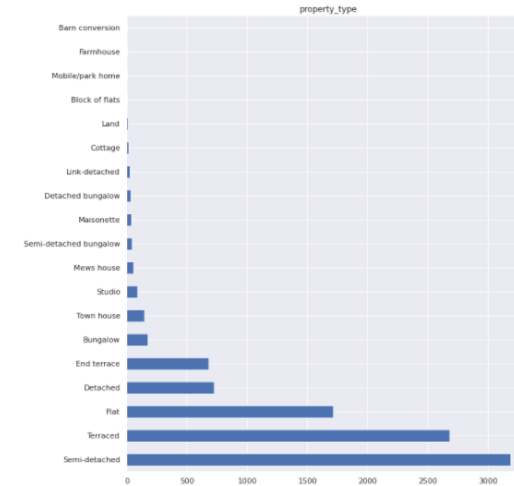- Liverpool data has MoM volatility where the highest average price was close to Manchester's July value

Which Outward Code had the highest volume of listings?
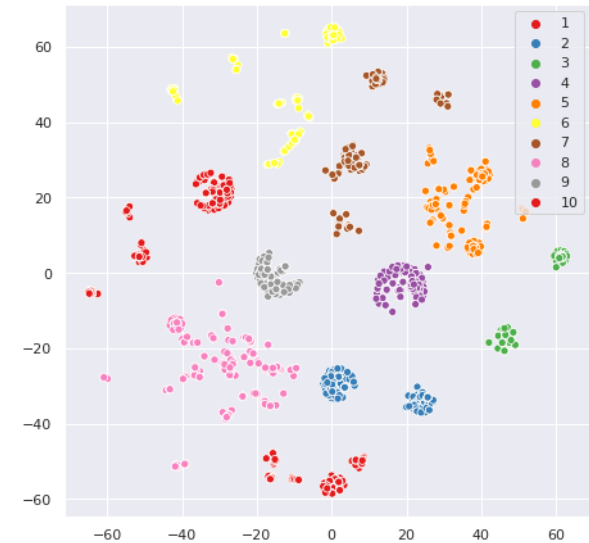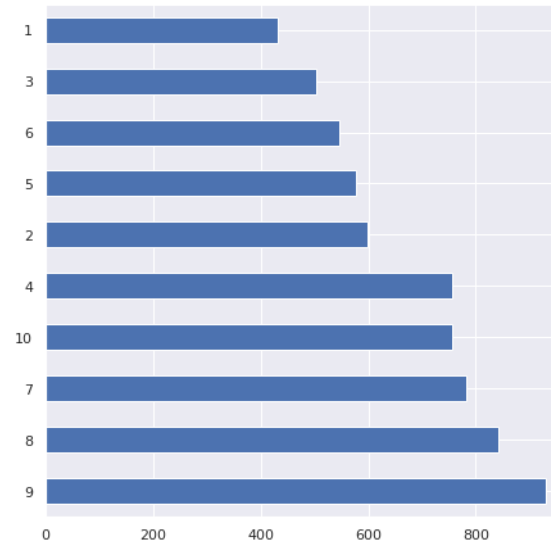
- M28

outcode

Comments on data quality

- Several 'land' property_type have rooms greater than 0 which is a contradiction. Potentially mislabeled given the prices have a large spread.

- There are missing property type labels in the dataset also (i.e. blanks) which impacts roughly 77 rows.

- Some properties were already duplicated on the original csv file which can skew averages and other calculations.

- Dataset has a bias towards terraced, semi-detached & Flat properties

Is there any clustering that could be applied to gain more insight into house trends?

- Please see Jupyter notebook for Clustering script.

- The result on the RHS was an output withing the submitted notebook.

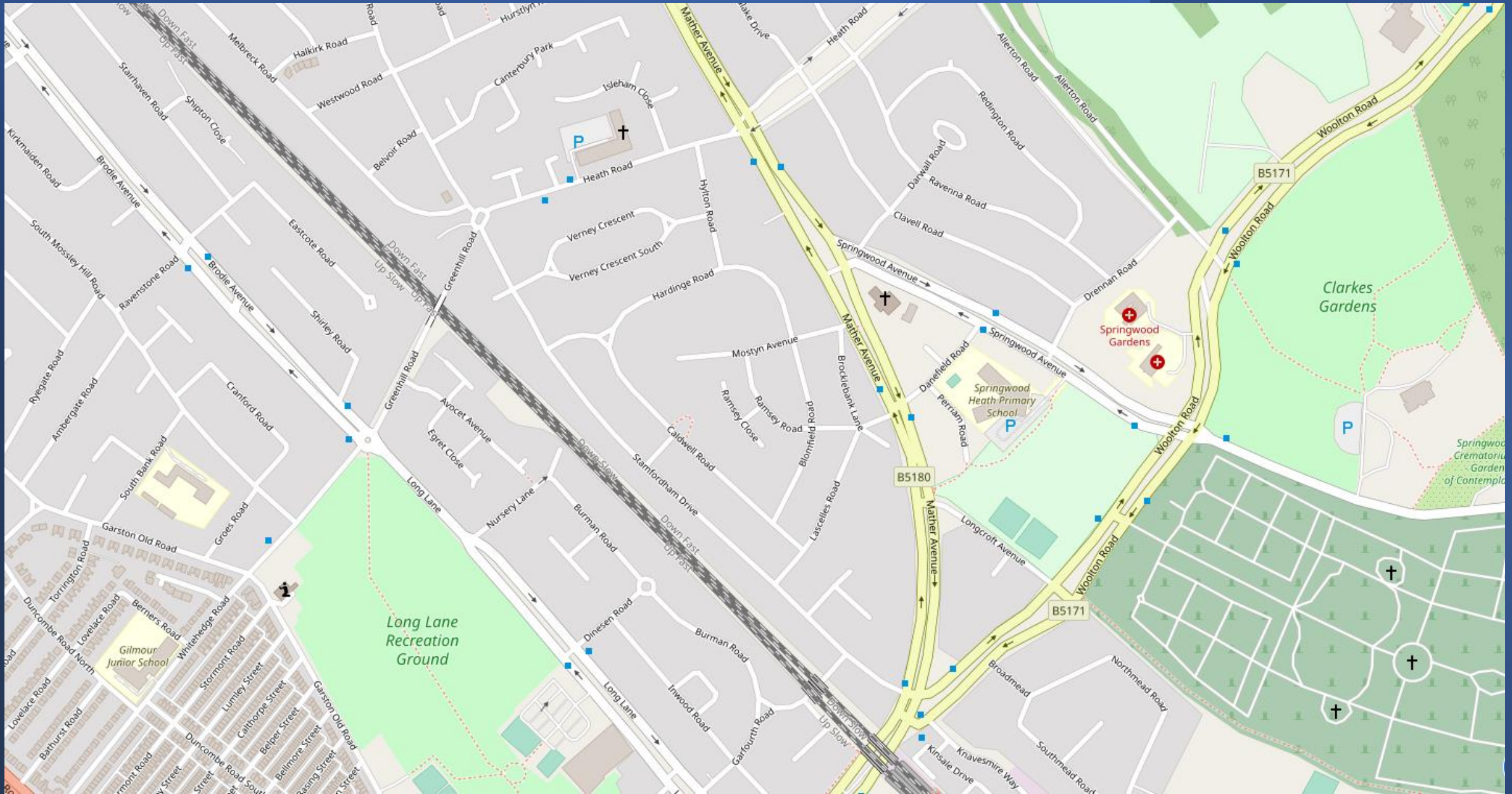- Link: https://github.com/yshassan/strike_clustering_submission/blob/main/Strike_Algorithm%20(2).ipynb

Clustering Figures missing from notebook

Map 1 (omitted from notebook)

Map 2 (omitted from notebook)