

Applied Data Science

Assignment 1

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Dataset Line Chart: <https://landregistry.data.gov.uk/app/ukhpi/browse?from=2022-01-01&location=http%3A%2F%2Flandregistry.data.gov.uk%2Fid%2Fregion%2FUnited-kingdom&to=2023-01-01&lang=en>

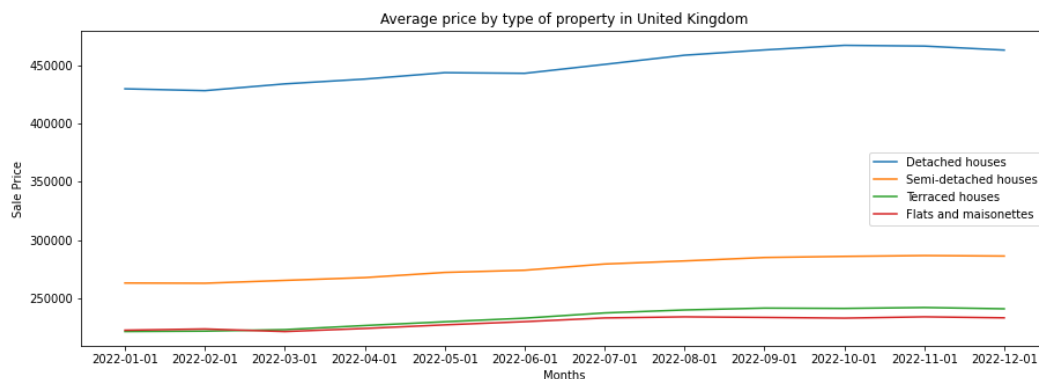
Dataset Pie Chart: <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/population-of-england-and-wales/latest>

Dataset Bar Chart:

[https://landregistry.data.gov.uk/app/ukhpi/compare?in=avg&location\[\]=K02000001&location\[\]=S92000003&location\[\]=N92000001&st=all&lang=en](https://landregistry.data.gov.uk/app/ukhpi/compare?in=avg&location[]=K02000001&location[]=S92000003&location[]=N92000001&st=all&lang=en)

Github Link: <https://github.com/nomanmehar5/ADSA1>

Line plot

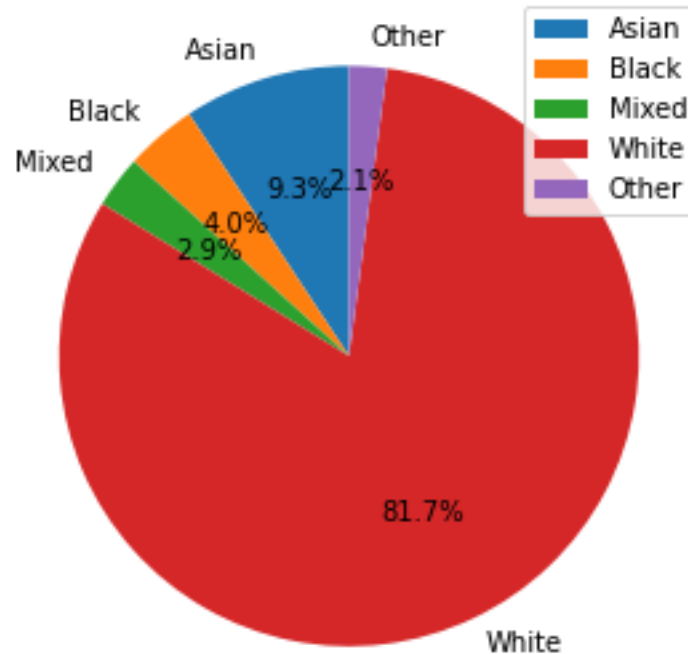


This line chart with the title “Average price by type of property in the United Kingdom” shows us the average price in the United Kingdom for four types of houses. Detached houses, semi-detached houses, terraced houses, and flats and maisonettes. The X-axis shows us the date and Y-axis shows us the sales price of the houses. We can conclude that detached houses’ prices are higher than others and increasing throughout the year. Semi-detached houses’ prices are quite lower than detached houses but higher than the other two types of houses. Terraced houses and flats and maisonettes prices are the same at the start of the year but at the end, terraced houses have slightly higher sale prices than flats and maisonettes.

Produce graphs using two other visualisation methods.

a) Pie Chart

2021 Population data of communities living in UK



I picked this chart because it can be distributed 100 percent into different parts so that it's easy to understand the data in the shape of a Pie Chart. The pie chart shows us the data of the UK population of different communities in 2021. Different colors describe different communities in the chart. Red shows the local population or population of white people, which has a significant percentage over other communities. After white, Asian has the most number of percentage which is 9.3% and after that Black, Mixed and Other communities come respectively.

b) Bar Chart



I chose this bar chart to compare the houses' prices in three different countries. Different colors in legends describe which bar belongs to which country. On the chart we can see that the x-axis has the Months and the Y-axis is labeled as sales prices. England houses' are the most expensive and their prices have continuously increased throughout the year. Scotland has slightly more expensive houses than Northern Ireland.