The first case study that was to be completed in my data science boot camp was an assignment where we examined the housing data in the 32 boroughs of London from 1995 until 2022. We determined which boroughs had been the most expensive to purchase a house in, which boroughs were the cheapest, and which boroughs had the highest ratio of price change from 1995 to 2022.

Looking back to 1995, the most affordable 5 boroughs to purchase property in were as follows:

1. Barking & Dagenham, average price of £51,817.97
2. Newham, average price of £54,574.23
3. Lewisham, average price of £58,881.77
4. Waltham Forest, average price of £61,279.98
5. Greenwich, average price of £63,389.79

The top 5 most expensive boroughs to purchase property in were:

1. Kensington & Chelsea, with an average price of £192,857.26
2. Westminster, with an average price of £133,689.23
3. Hammersmith & Fulham, with an average price of £123,238.00
4. Camden with an average price of £120,367.43
5. Richmond upon Thames with an average price of £109,892.27

Now jumping ahead to 2022, the most affordable 5 boroughs to purchase property in were:

1. Barking & Dagenham, average price of £343,602.65
2. Bexley, average price of £394,555.24
3. Newham, average price of £407,132.93
4. Croydon, average price of £418,353.72
5. Havering, average price of £419,673.48

The top 5 most expensive boroughs to purchase property in were:

1. Kensington & Chelsea, with an average price of £1,450,442.90
2. Westminster, with an average price of £858,316.22
3. Camden, with an average price of £858,316.22
4. Hammersmith & Fulham with an average price of £769,672.99
5. Richmond upon Thames with an average price of £750,312.19

In 1995, Bexley ranked 8th most affordable borough to live in, dropping down to 2nd in 2022. Lewisham went from 3rd most affordable in 1995, to 10th in 2022, Waltham Forest rose from 4th most affordable to 15th, making its way into the midrange tier of London. Greenwich moved from 5th to 6th keeping relatively in the same position. Newcomers to the more affordable list for 2022 sees Bexley dropping from 8th to 2nd, Croydon dropping from 12th to 4th, and Havering dropping from 15th to 5th. All the most expensive boroughs retain the same names, some of them might have moved up or down in rankings.

What is really interesting is this, on average housing prices in the most expensive borough back in 1995 were cheaper than the least expensive borough in 2022, with an average increase of £150,745.39, with the average price more than tripling the average price of a home in Richmond upon Thames in 1995. A home in Barking & Dagenham averages £291,784.68 more than it did back in 1995, while a house in Kensington & Chelsea averages £1,257,585.64 more than back in 1995.

The boroughs that have seen the highest ratio in price change were Hammersmith & Fulham, Hounslow, Harrow, Bromley, and Richmond upon Thames.

I have arrived at my conclusion by separating the data into 2 categories: 1995, and 2022. I then organized them from most expensive to least. I finally generated a bar graph showing the ratio of the highest average prices per borough.

Some of the main challenges that I encountered were not knowing exactly what to do at certain points, so I walked through the tier 1 and 2 versions and made sure that I understood the data cleaning processes. What I would like to investigate deeper is why some boroughs became more affordable while others became less.