Unit 4.3 Case Study: London Housing

***Q: Which boroughs of London have seen the greatest increase in housing prices, on average, over the last two decades?***

***A: Hounslow (based on ratio of 1998-2018)***

* What did you find? Which borough is the most expensive? Any other interesting trends?

Based on the final plot, the top 15 boroughs of London with the highest increase in ratio when comparing housing prices from 1998 to 2018 are all above 20%. The borough that increased the most since 1998 to 2018 is Hounslow at 25.15%. Based on the Camden\_prices graph, we can see the average prices in Camden borough stabilizing around the 800k to 900k range from 2017 to 2020. The graph also clearly shows a rapid increase of average housing prices in Camden from 2010 to 2014. While in 2009 to 2010 the average prices in Camden experienced a significant drop of about 100k.

* How did you arrive at your conclusion?

After cleaning and tidying up the DataFrame, a graph was plotted based on the ratio of average prices from 1998 and 2018. After removing all NaN values, the final plot clearly shows that Hounslow Borough has the greatest increase on average in housing prices over the last two decades.

* What were the main challenges you encountered? How did you overcome them? What could you not overcome?

The main challenges I encountered while trying to solve this problem was remembering the functions needed to solve this question. I overcame them by trial and error. The other challenge I faced while trying to complete this task was not remembering the actual term for the function I want to use. This made things a little more difficult when searching the web. However, since this project is pretty simple, there was not too much difficulty in looking up the codes that I need. What helped me the most was just printing out each command I used to see the results or changes I have done.

* Is there anything you’d like to investigate deeper?

Things that would be interesting to investigate deeper would be the history of the economy of each Borough in London corresponding to each year. This would help explain more in depth as to why the prices in certain Boroughs increase or decrease whether slowly or rapidly. One other thing I would like to investigate deeper would be to familiarize myself with the geography of each Borough in London. This would help me gain a better understanding where there is a concentration of people migrating or immigrating to and from a specific Borough.