Thanks Dave.

As Dave mentioned that we do have various options to enter into property market, but the real question is which option we shall take and how do we know if that is the most financially rewarding choice. Well, let data do the talking. Starting from data request.:

In order to answer the question how has NSW residential housing market performed in the last decade, we invited the following 2 data sources: first of all, let me introduce you to Domain.com API. Domain API will take us to explore the housing data we are interested, such as Median Sales Price. Meanwhile, to make our life easier, we would also get some help from Australia Post where we can get a complete list of postcodes and suburbs in NSW.

on the other hand,to access the listed property fund information, we seek assistance from Yahoo! Finance market data downloader which gives us access to ASX listed shares information such as daily closing price. Furthermore, with the property sector information listed on ASX listcorp.com, we are able to select 10 shares covers large cap, mid cap and small cap and include funds investment in residential, commercial, retail, office space etc. to gain more diversified variety in our investment portfolio.

Now we have the keys to the powerful data world, let us begin our journey!

I ll briefly illustrate how we request data and handle data for NSW residential property market and Terry will touch base on how to request data using YahooFinance later.

Before we request data from Domain.com, we need to ask ourselves which suburbs data shall we choose. As human, we are biased, but not the Algorithm, so we let NUMPY to choose the random 50 suburbs from our more than 4000 suburbs in NSW.

With the 50 suburbs in question, we then set up our API key and construct our url according to the documentation of Domain.com. Please see the example in green box. We will demonstrate how to run the codes if anyone is interested in Q&A session.

API key opened the door to NSW property database, but the data loaded is not in the csv format which we are used to, so we write some codes to dump data to and save as json file. On the other hand, like everything else, there will error and exception when working with API, hence, we designed the codes in orange box to Try and Except those errors to ensure when we call our defined function “get\_property\_info( )” it works smoothly and tells us which suburbs has errors.

Again, reality always through some complexity, although, the data we got are far away from perfect, thanks to Dave’s spring clean, it all worked out beautifully.

Pass it on to you, Dave.