Problem Solving

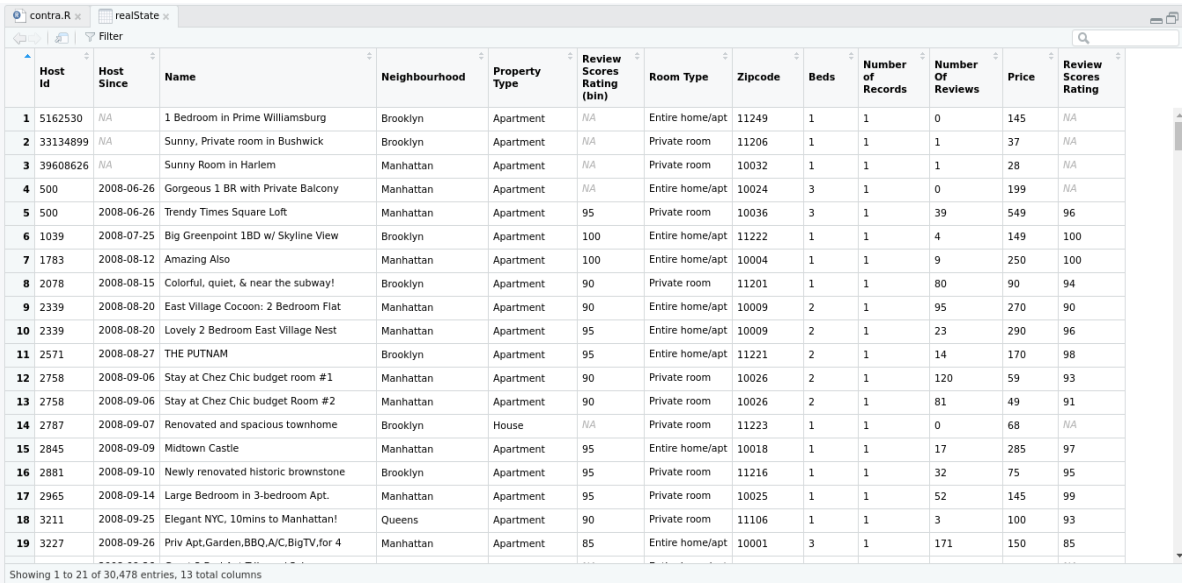
(NAME)
(REGISTRATION NUMBER)

1.0 Introduction

For the data analysis purpose there are number of popular tools and application that can be used. Considering the performance ratings and user experiences R-Studio is effective and poplar tool among the community of the data science. R Studio contains more attractive and effective features when we compare with the competitors. Considering the programming languages like python and other analyzing languages R programming stand at the top of the performance list because of the incredible performance. Specialty with the R programming is users can simply run the commands line by line and do no have to compile the entire document for the outputs. That saves a lot of time and effort in the programming manner.

Apart from all that R Studio allow users to power up the R programming platform and in that way users can freely manage the way of using the visualization tools and other additional features with a minimum time period. Analyzing features in the R studio tool is very reliable and put the flags on the precise locations in the data sets that are questionable. Along with that R programming and R studio consist of vector operations which can be helpful in a considerably larger operations. Which means users do not have to so many loops and repetitive operations to go through the document. Well supported community and so many packages are to make sure that the users are not left alone in the data science.

I have selected a data set from a real state business in USA. This data set represents all the apartments that have been owned by the business and the customer feedback as well as the description. The data set has imported to the R Studio and rest of the analyzing portions are based on this data set.



contra.R | realState

Filter

	Host Id	Host Since	Name	Neighbourhood	Property Type	Review Scores Rating (bin)	Room Type	Zipcode	Beds	Number of Records	Number Of Reviews	Price	Review Scores Rating
1	5162530	NA	1 Bedroom in Prime Williamsburg	Brooklyn	Apartment	NA	Entire home/apt	11249	1	1	0	145	NA
2	33134899	NA	Sunny, Private room in Bushwick	Brooklyn	Apartment	NA	Private room	11206	1	1	1	37	NA
3	39608626	NA	Sunny Room in Harlem	Manhattan	Apartment	NA	Private room	10032	1	1	1	28	NA
4	500	2008-06-26	Gorgeous 1 BR with Private Balcony	Manhattan	Apartment	NA	Entire home/apt	10024	3	1	0	199	NA
5	500	2008-06-26	Trendy Times Square Loft	Manhattan	Apartment	95	Private room	10036	3	1	39	549	96
6	1039	2008-07-25	Big Greenpoint 1BD w/ Skyline View	Brooklyn	Apartment	100	Entire home/apt	11222	1	1	4	149	100
7	1783	2008-08-12	Amazing Also	Manhattan	Apartment	100	Entire home/apt	10004	1	1	9	250	100
8	2078	2008-08-15	Colorful, quiet, & near the subway!	Brooklyn	Apartment	90	Private room	11201	1	1	80	90	94
9	2339	2008-08-20	East Village Cocoon: 2 Bedroom Flat	Manhattan	Apartment	90	Entire home/apt	10009	2	1	95	270	90
10	2339	2008-08-20	Lovely 2 Bedroom East Village Nest	Manhattan	Apartment	95	Entire home/apt	10009	2	1	23	290	96
11	2571	2008-08-27	THE PUTNAM	Brooklyn	Apartment	95	Entire home/apt	11221	2	1	14	170	98
12	2758	2008-09-06	Stay at Chez Chic budget room #1	Manhattan	Apartment	90	Private room	10026	2	1	120	59	93
13	2758	2008-09-06	Stay at Chez Chic budget Room #2	Manhattan	Apartment	90	Private room	10026	2	1	81	49	91
14	2787	2008-09-07	Renovated and spacious townhome	Brooklyn	House	NA	Private room	11223	1	1	0	68	NA
15	2845	2008-09-09	Midtown Castle	Manhattan	Apartment	95	Entire home/apt	10018	1	1	17	285	97
16	2881	2008-09-10	Newly renovated historic brownstone	Brooklyn	Apartment	95	Private room	11216	1	1	32	75	95
17	2965	2008-09-14	Large Bedroom in 3-bedroom Apt.	Manhattan	Apartment	95	Private room	10025	1	1	52	145	99
18	3211	2008-09-25	Elegant NYC, 10mins to Manhattan!	Queens	Apartment	90	Private room	11106	1	1	3	100	93
19	3227	2008-09-26	Priv Apt,Garden,BBQ,A/C,BigTV,for 4	Manhattan	Apartment	85	Entire home/apt	10001	3	1	171	150	85

Showing 1 to 21 of 30,478 entries, 13 total columns

Image 1: Data Set for the Analyzing

2.0 Visualizations of the data-set

2.1 Mean

In this data-set we have to look in to the pricing and rating of the Apartments. There are more than 30,000 inputs and the mean of the categories are calculated as follows.

```
> mean(realState$Price)
[1] 163.5897
```

Image 2: Mean of the data set

Here I have exercised the mean syntax in R programming in R Studio. Simply it gives the mean of the column that I have selected in the syntax in this case the prices of the apartments. There are limited number of objects that the visualization tools can be applied because some of the columns contain unfilled rows and lines which can leads to a false analytical summary.

2.2 Standard Deviation

Standard deviation is a comparison measurement that can be used to analysis the behavior of the data set in the future and mostly used in forecasting.

```
> sd(realState$Price)
[1] 197.7855
```

Image 3: Standard Deviation

This data set has a standard deviation of 197.7855 in the price section and I used sd syntax for the calculation.

2.3 Histogram