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<u>Methodology Document - Airbnb CaseStudy</u>
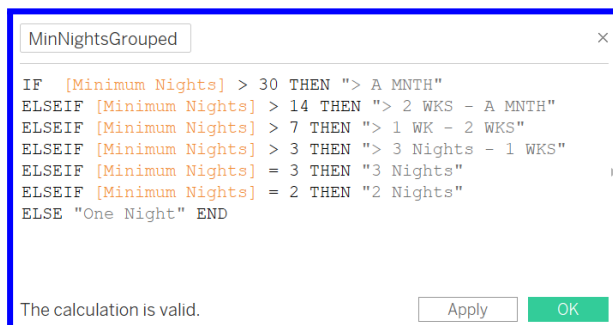
<u>Data Source</u>

1. File Name : "AB_NYC_2019.csv"
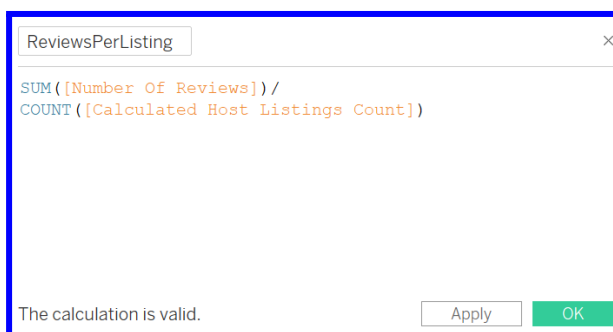
<u>Data Reading & Initial Checks</u>

1. Read the csv file in tableau
2. Get familiarized with the data and noted down important fields
    a) Observed a small proportion of null values
    b) which would not affect my analysis so let them stay as it is

<u>Data Wrangling</u>

1. Performed univariate analysis to see the following (using boxplots and tables)
2. Distributions of the fields
    a. Unique values
    b. Outliers if any

3. Created a grouped field for Minimum Number of Days assuming null values belonged to the category

```
MinNightsGrouped                                          ×

IF  [Minimum Nights] > 30 THEN "> A MNTH"
ELSEIF [Minimum Nights] > 14 THEN "> 2 WKS - A MNTH"
ELSEIF [Minimum Nights] > 7 THEN "> 1 WK - 2 WKS"
ELSEIF [Minimum Nights] > 3 THEN "> 3 Nights - 1 WKS"
ELSEIF [Minimum Nights] = 3 THEN "3 Nights"
ELSEIF [Minimum Nights] = 2 THEN "2 Nights"
ELSE "One Night" END



The calculation is valid.              Apply      OK
```

4. Created a calculated field of number of reviews per listing

```
ReviewsPerListing                                         ×

SUM([Number Of Reviews])/
COUNT([Calculated Host Listings Count])






The calculation is valid.              Apply      OK
```

Data Analysis & Visualisations

1. Visualized the distribution of the room type in the dataset with Donut chart
2. visualized the distribution of cities (neighborhood group) in the dataset with room type as hue using the stacked bar chart.
3. Visualized the ranking of cities with pareto chart showing the cumulative percentage of contribution.
4. Visualized the median pricing the vs the cities using the bubble chart.
5. Identified the top 10 properties on median pricing
6. visualized the cites order through a Treemap based on median pricing
7. visualized the guests preference in min.numbers of nights (grouped variable)
8. Spotted the top10 properties with the help of the guests review.

Storyboarding

1. Made a mind map of the various slides of the presentation
2. Noted down all the inferences came out in the analysis phase
3. Prioritized the inferences and key-points for the presentation
4. Made a rough template based on this mind map

Presentation

1. Made the presentation adhering to best practices:
   a. Pyramid principle
   b. Rule of three
2. Added recommendations for the respective departments