

Lab1 - Airbnbs in NYC

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```
#loading packages
library(readr)
library(ggribes)
library(tidyverse)
```

```
-- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
v dplyr      1.1.4      v purrr      1.0.2
v forcats    1.0.0      v stringr    1.5.1
v ggplot2    3.5.1      v tibble     3.2.1
v lubridate  1.9.3      v tidyr      1.3.1
```

```
-- Conflicts ----- tidyverse_conflicts() --
```

```
x dplyr::filter() masks stats::filter()
```

```
x dplyr::lag()     masks stats::lag()
```

```
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become
```

```
nycbnb = read_csv("nycbnb.csv")
```

```
Rows: 37765 Columns: 11
```

```
-- Column specification -----
```

```
Delimiter: ","
```

```
chr (3): neighborhood, borough, listing_url
```

```
dbl (8): id, price, accommodates, bathrooms, bedrooms, beds, review_scores_r...
```

```
i Use `spec()` to retrieve the full column specification for this data.
```

```
i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

Problem 1. How many observations (rows) does the dataset have? Instead of hard coding the number in your answer, use inline code.

```
nrows <- nycbnb %>% nrow()
print(paste("The dataset contains",nrows,"observations"))
```

```
[1] "The dataset contains 37765 observations"
```

Problem 2. Run `View(nycbnb)` in your Console to view the data in the data viewer. What does each row in the dataset represent?

Each column represents a variable. We can get a list of the variables in the data frame using the `names()` function.

```
names(nycbnb)
```

```
[1] "id"                "price"                "neighborhood"
[4] "borough"           "accommodates"         "bathrooms"
[7] "bedrooms"          "beds"                 "review_scores_rating"
[10] "number_of_reviews" "listing_url"
```

Each row represents an individual listing.

Problem 3. Pick one of the five boroughs of NYC (Manhattan, Queens, Brooklyn, the Bronx, or Staten Island), and create a faceted histogram where each facet represents a neighborhood in your chosen borough and displays the distribution of Airbnb prices in that neighborhood. Think critically about whether it makes more sense to stack the facets on top of each other in a column, lay them out in a row, or wrap them around. Along with your visualization, include your reasoning for the layout you chose for your facets.