title: "schhabr1" author: "sharon" date: "2024-02-02" output: pdf_document: default word_document: default

```r
a<- read.csv("new_york_listings_2024.csv")
```

```r
summary(a)
```

```
##        id                name               host_id           host_name
##  Min.   :2.595e+03   Length:20758       Min.   :      1678   Length:20758
##  1st Qu.:2.709e+07   Class :character   1st Qu.: 20417384    Class :character
##  Median :4.993e+07   Mode  :character   Median :108727121    Mode  :character
##  Mean   :3.034e+17                      Mean   :174931562
##  3rd Qu.:7.216e+17                      3rd Qu.:314410176
##  Max.   :1.054e+18                      Max.   :550403525
##  neighbourhood_group neighbourhood         latitude        longitude
##  Length:20758        Length:20758       Min.   :40.50   Min.   :-74.25
##  Class :character    Class :character   1st Qu.:40.68   1st Qu.:-73.98
##  Mode  :character    Mode  :character   Median :40.72   Median :-73.95
##                                         Mean   :40.73   Mean   :-73.94
##                                         3rd Qu.:40.76   3rd Qu.:-73.92
##                                         Max.   :40.91   Max.   :-73.71
##    room_type            price          minimum_nights   number_of_reviews
##  Length:20758       Min.   :    10.0   Min.   :   1.00   Min.   :   1.00
##  Class :character   1st Qu.:    80.0   1st Qu.:  30.00   1st Qu.:   4.00
##  Mode  :character   Median :   125.0   Median :  30.00   Median :  14.00
##                     Mean   :   187.8   Mean   :  28.56   Mean   :  42.64
##                     3rd Qu.:   199.0   3rd Qu.:  30.00   3rd Qu.:  49.00
##                     Max.   :100000.0   Max.   :1250.00   Max.   :1865.00
##  last_review        reviews_per_month calculated_host_listings_count
##  Length:20758       Min.   : 0.010    Min.   :  1.00
##  Class :character   1st Qu.: 0.210    1st Qu.:  1.00
##  Mode  :character   Median : 0.650    Median :  2.00
##                     Mean   : 1.258    Mean   : 18.84
##                     3rd Qu.: 1.800    3rd Qu.:  5.00
##                     Max.   :75.490    Max.   :713.00
##  availability_365 number_of_reviews_ltm   license            rating
##  Min.   :  0      Min.   :   0.00        Length:20758       Length:20758
##  1st Qu.: 87      1st Qu.:   1.00        Class :character   Class :character
##  Median :215      Median :   3.00        Mode  :character   Mode  :character
##  Mean   :206      Mean   :  10.85
##  3rd Qu.:353      3rd Qu.:  15.00
##  Max.   :365      Max.   :1075.00
##    bedrooms             beds             baths
##  Length:20758       Min.   : 1.000   Length:20758
##  Class :character   1st Qu.: 1.000   Class :character
##  Mode  :character   Median : 1.000   Mode  :character
##                     Mean   : 1.724
##                     3rd Qu.: 2.000
##                     Max.   :42.000
```

#Transforming Bedroom variable as factors

```
a$bedrooms <-as.factor(a$bedrooms)

library(ggplot2)
library(esquisse)

#esquisser()

library(ggplot2)

ggplot(a) +
 aes(x = minimum_nights, y = price) +
 geom_area() +
 theme_minimal()
```