

NewYears

2023-03-01

Setup

Load packages

Input Load the data

Subset of the listings dataset for all cities

Transformation Summary statistics on the price of the cities for the listings dataset

```
prices_cities <- total_list %>%
  select ("price", "city")

price_summary <- data.table(na.omit(prices_cities))
price_summary[, price := gsub('[\$]', '', price) %>% as.numeric(as.character(price))]
```

```
## Warning in gsub("[\$]", "", price) %>% as.numeric(as.character(price)): NAs
## introduced by coercion
```

```
price_summary <- price_summary[price > 0]
price_summary <- price_summary[, .(min_price = min(price), mean_price = mean(price),
                                   max_price = max(price)), by = city]

# display the price summary table
price_summary
```

```
##           city min_price mean_price max_price
## 1: Amsterdam      20    208.9832      999
## 2:   London       7    139.4911      999
## 3:    Paris       8    143.2158      999
## 4:    Rome        9    122.0354      999
```

Summary statistics for beds per city

```
## Summary statistics for Amsterdam
## Beds
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
##  1.000  1.000   1.000   1.873  2.000  33.000    91
## Summary statistics for London
## Beds
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   NA's
##  1.000  1.000   1.000   1.768  2.000  45.000  1180
## Summary statistics for Paris
## Beds
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
##      1.000   1.000   1.000   1.713   2.000   90.000    769
## Summary statistics for Rome
## Beds
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
##      1.00   1.00   2.00   2.24   3.00   24.00    339
```

Subset of the calendar dataset for all cities

Output

Number of available rooms per city between the 5th of December 2022 and the 4th of December 2023

```
##
##               Amsterdam  London   Paris    Rome
## available           575071 8090743 5704653 4923682
## unavailable       1910214 18165561 14405032 3968817
```

Number of rooms types per city

```
##
##               Amsterdam London Paris  Rome
## Entire home/apt           4910 43076 46785 16542
## Hotel room                 62   221   985   712
## Private room              1798 28258 7048 6992
## Shared room                39   383   286   137
```

Percentage number of rooms in Amsterdam

```
##
## Entire home/apt      Hotel room   Private room   Shared room
##      0.721104421      0.009105596      0.264062271      0.005727713
```

Percentage number of rooms in London

```
##
## Entire home/apt      Hotel room   Private room   Shared room
##      0.598793405      0.003072090      0.392810476      0.005324029
```

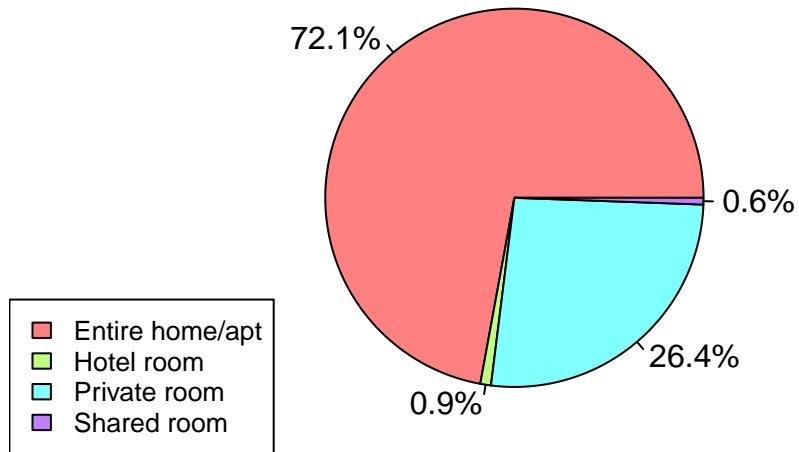
Percent number of rooms in Paris

```
##
## Entire home/apt      Hotel room   Private room   Shared room
##      0.849030923      0.017875290      0.127903600      0.005190186
```

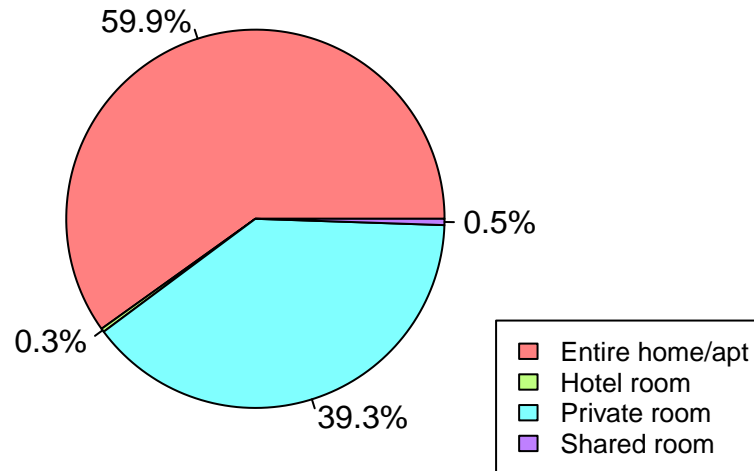
Percent number of rooms in Rome

```
##
## Entire home/apt      Hotel room   Private room   Shared room
##      0.678423492      0.029200673      0.286757167      0.005618669
```

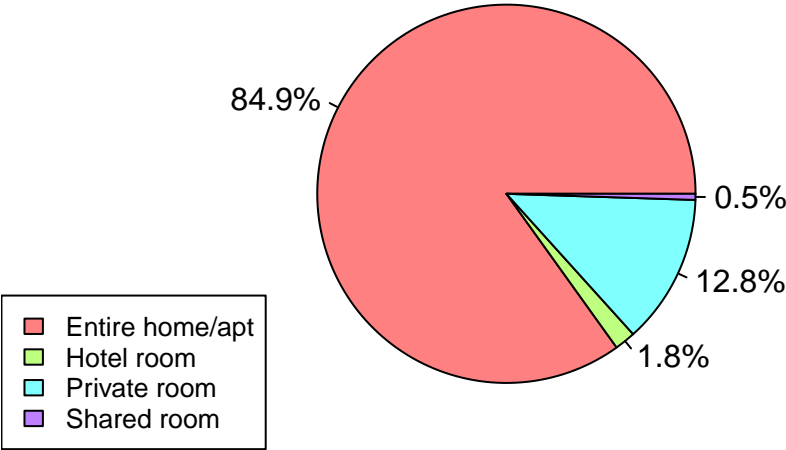
Airbnb room types offered in Amsterdam



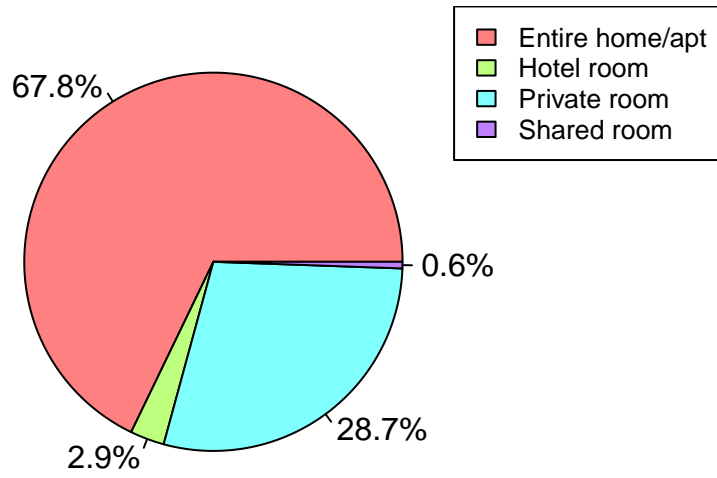
Airbnb room types offered in London

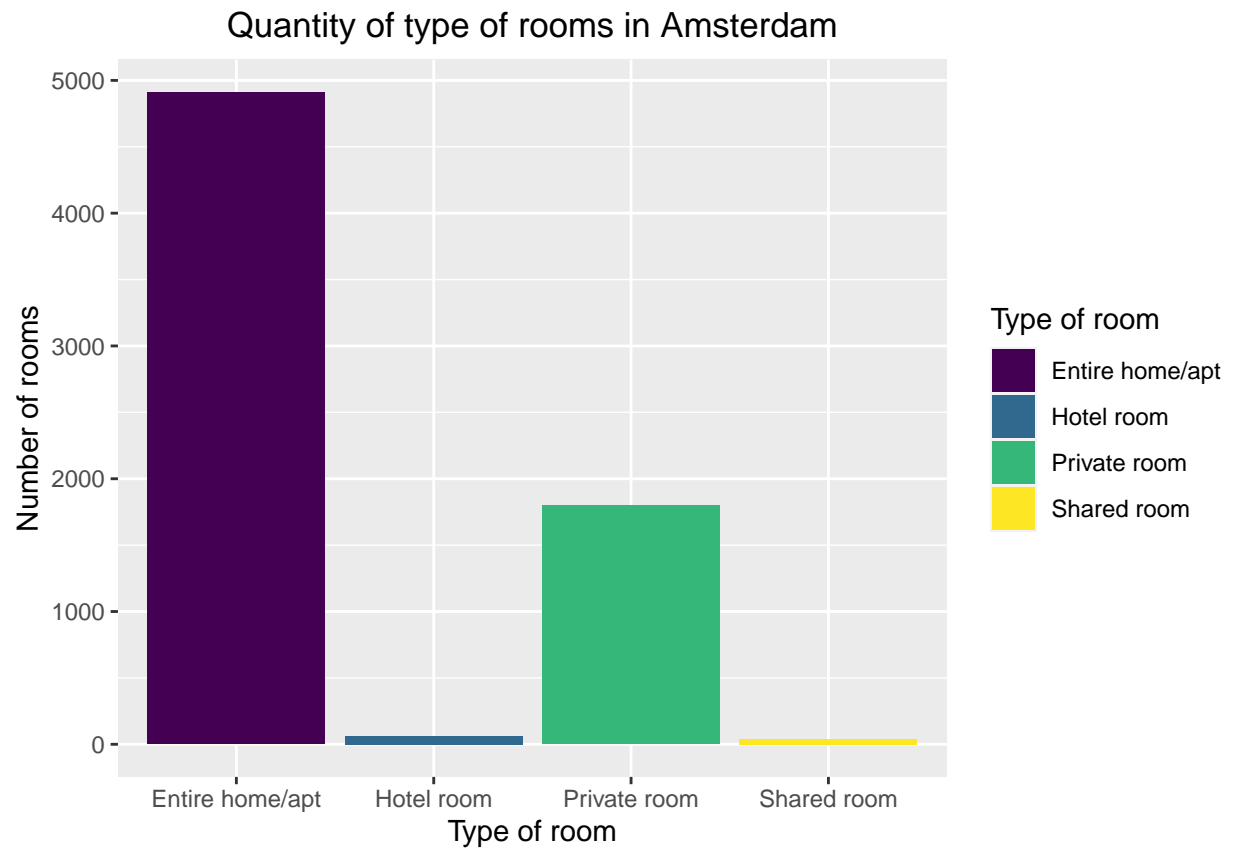


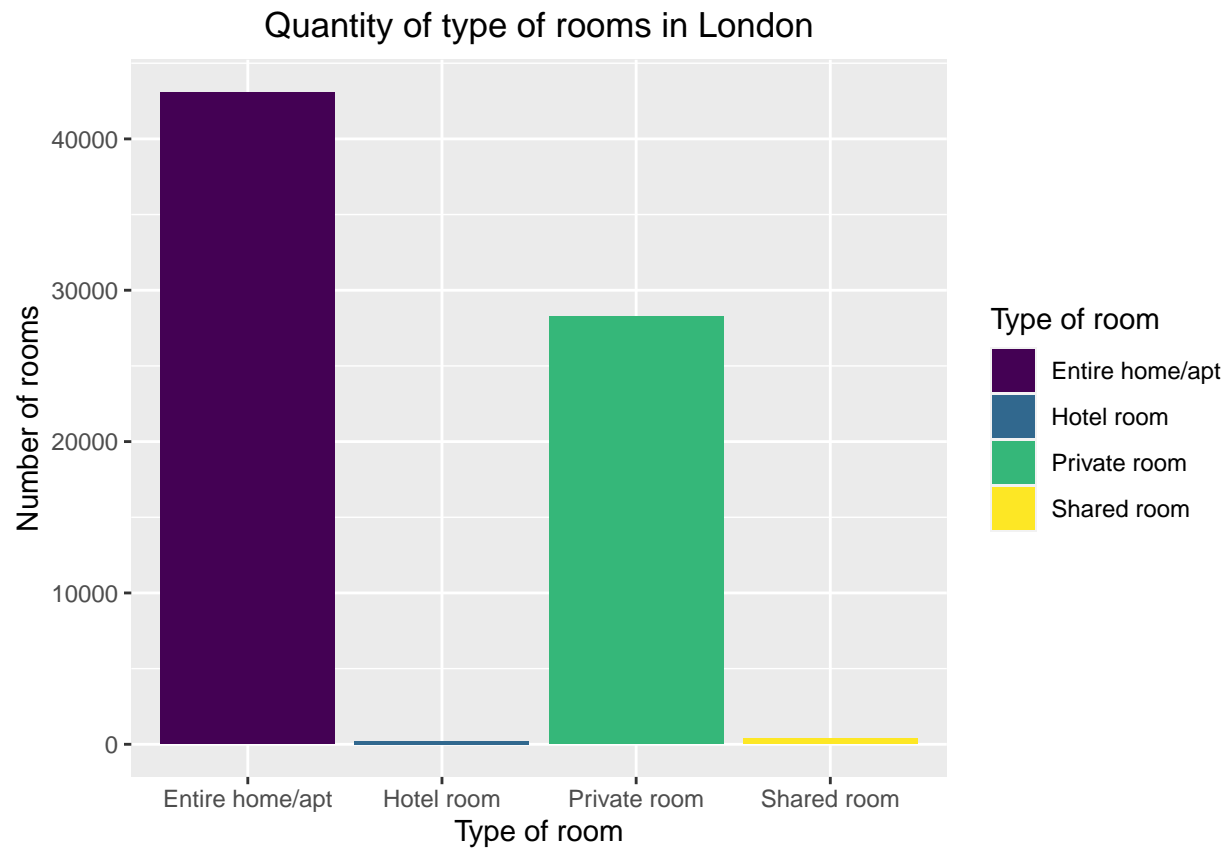
Airbnb room types offered in Paris

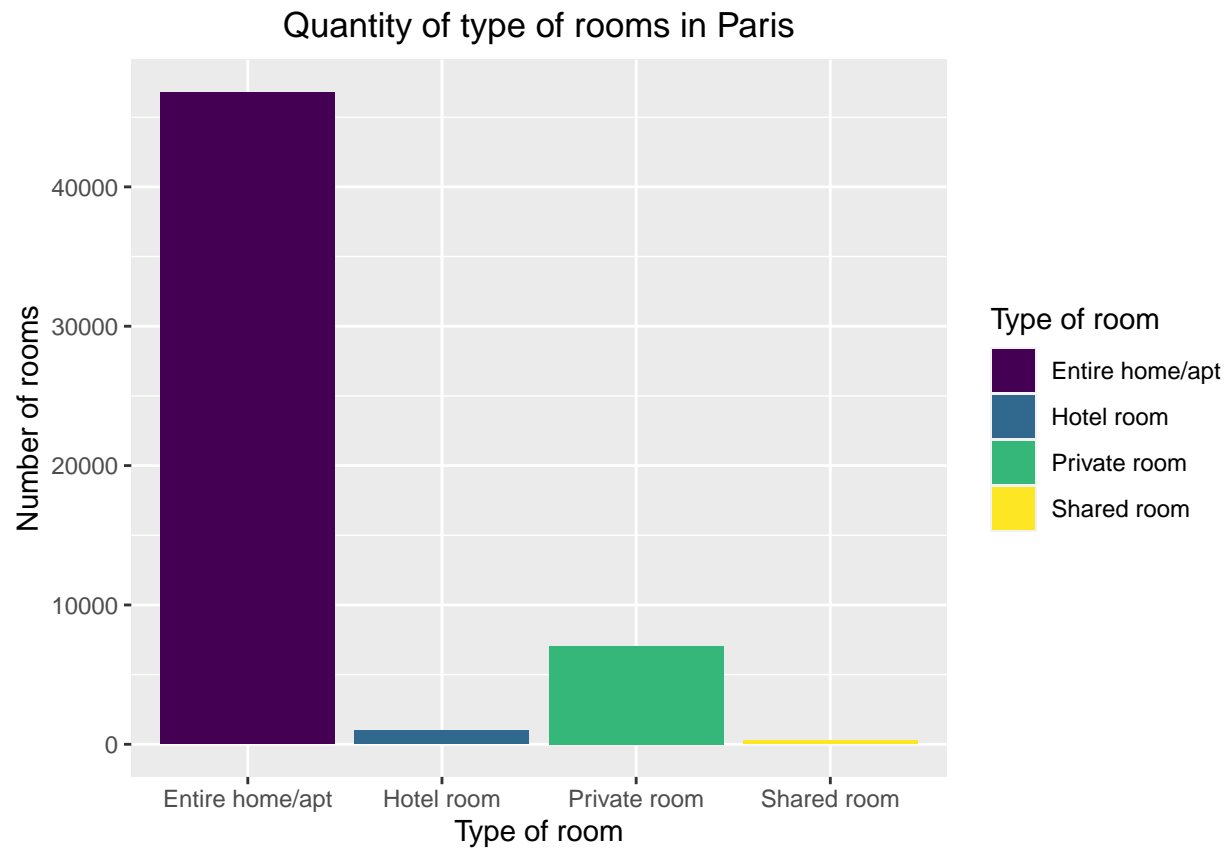


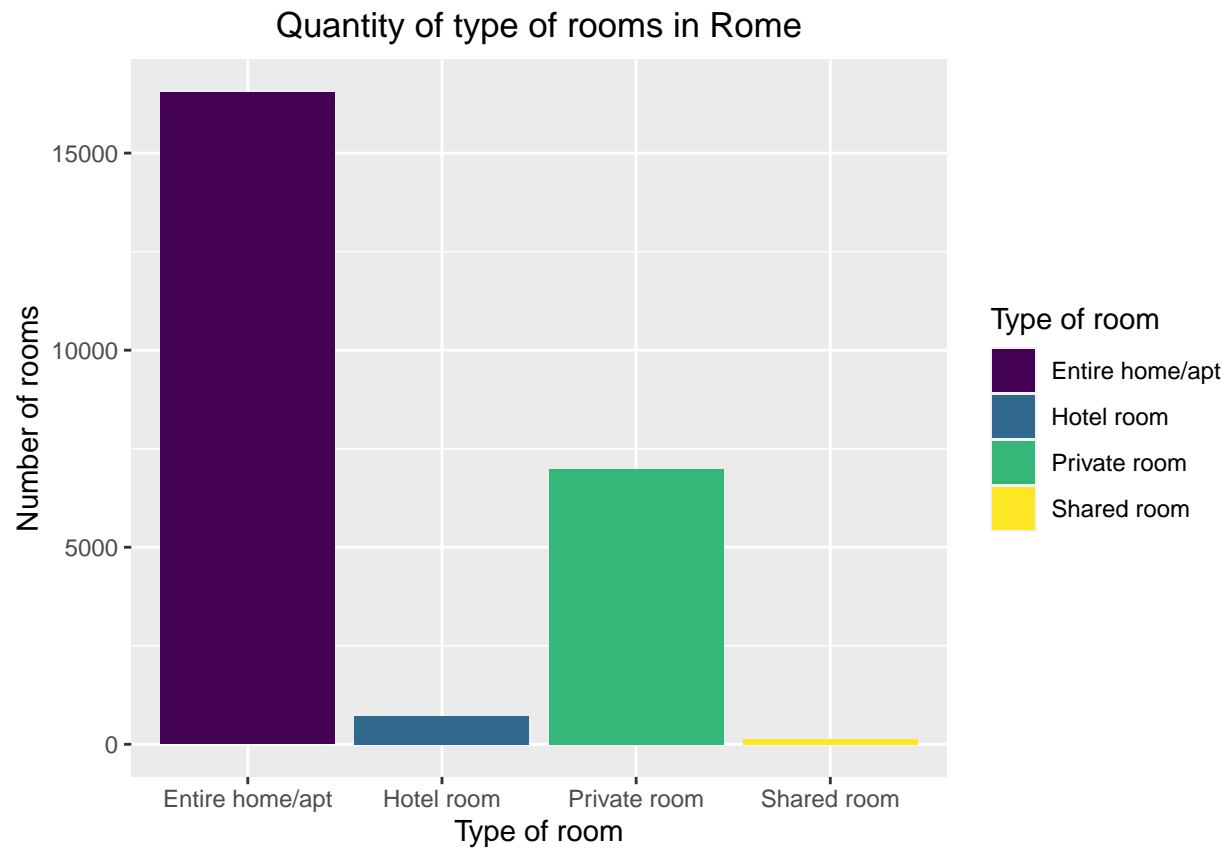
Airbnb room types offered in Rome



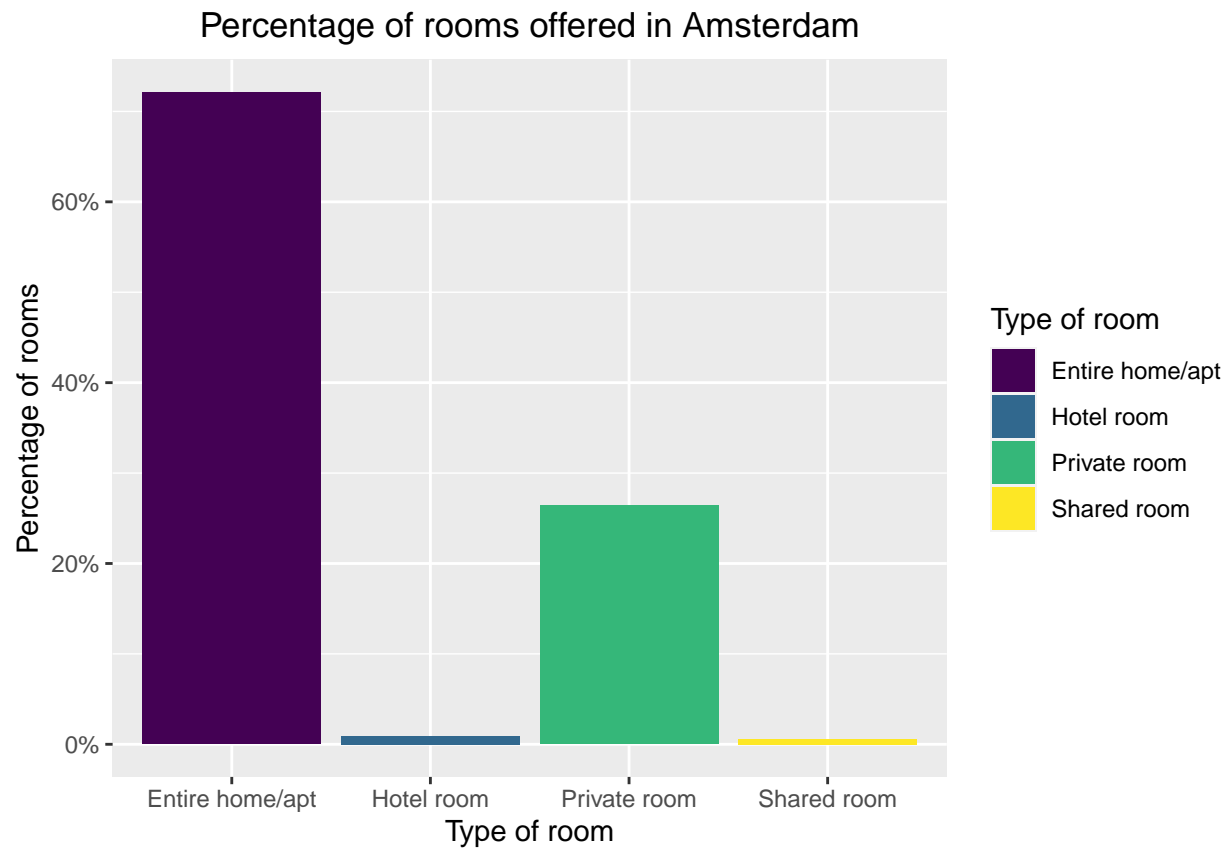


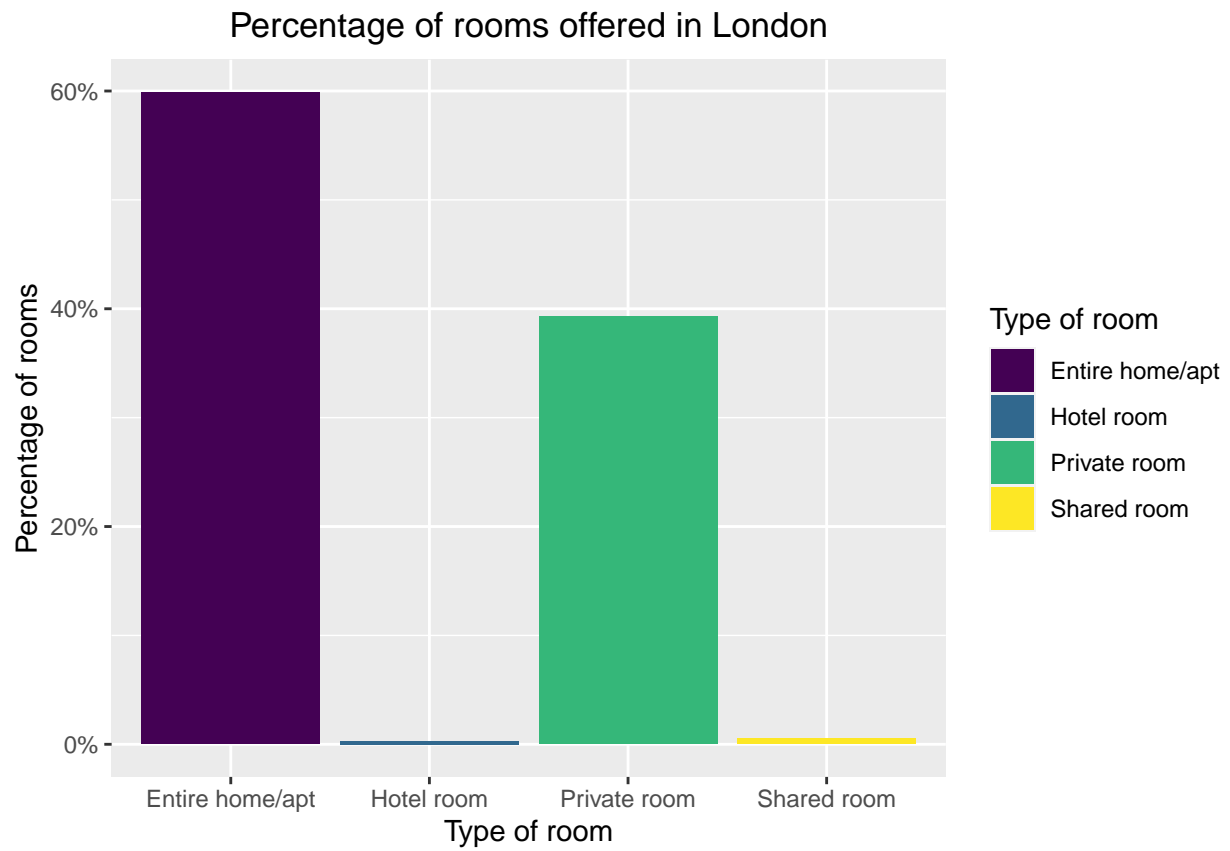


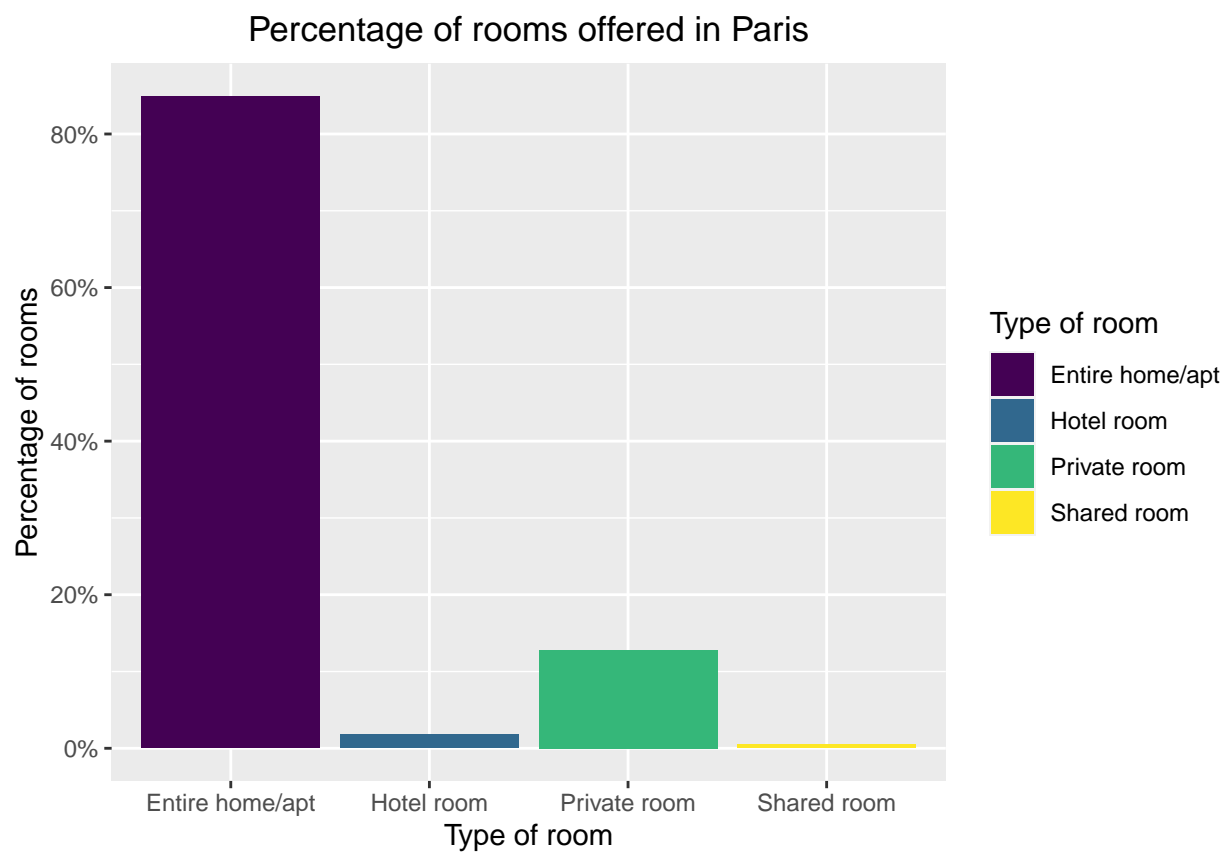


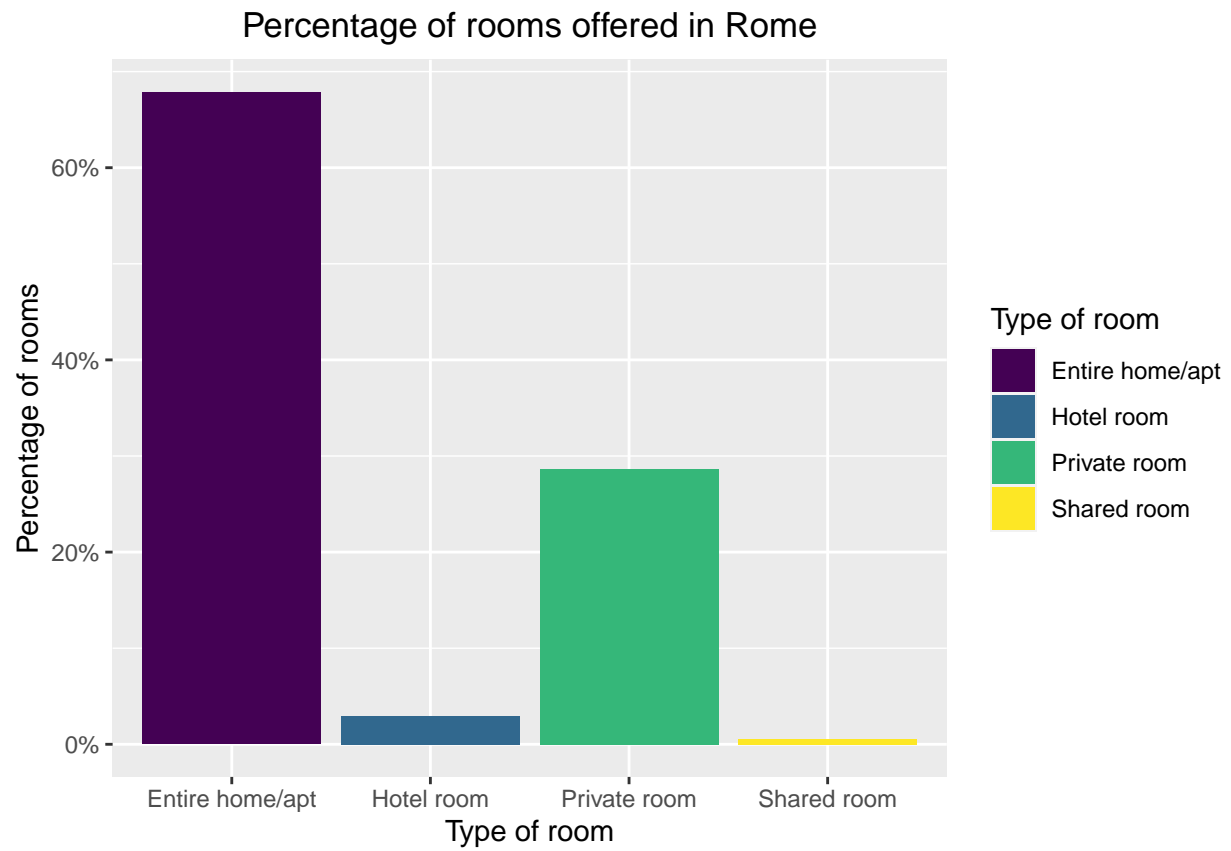


```
## Warning: The dot-dot notation ('..count..') was deprecated in ggplot2 3.4.0.  
## i Please use 'after_stat(count)' instead.
```









Number and type of rooms comparison between the cities

