# AtliQ Hotels Data Analysis Project

## Data Import and Data Exploration

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```
import pandas as pd
```

[64] ✓ 0.0s Python

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```
df_booking=pd.read_csv('../Hotel_Project.py/fact_bookings.csv')
df_booking.head(5)
df_booking.tail(5)
```

[65] ✓ 1.6s Python

| booking_id | property_id | booking_date | check_in_date | checkout_date | no_guests | room_category | booking_platform | ratings_given | booking_status | revenue_generate |
|---|---|---|---|---|---|---|---|---|---|---|
| Jul312217564RT46 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-03 | 1 | RT4 | makeyourtrip | 2.0 | Checked Out | 3230 |
| Jul312217564RT47 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-01 | 4 | RT4 | logtrip | 2.0 | Checked Out | 3876 |
| Jul312217564RT48 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-02 | 1 | RT4 | tripster | NaN | Cancelled | 3230 |
| Jul312217564RT49 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-01 | 2 | RT4 | logtrip | 2.0 | Checked Out | 3230 |
| Jul312217564RT410 | 17564 | 2022-07-31 | 2022-07-31 | 2022-08-01 | 2 | RT4 | makeyourtrip | NaN | Cancelled | 3230 |

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```
df_booking.loc[1:6:2]
```

[67] ✓ 0.0s Python

| | booking_id | property_id | booking_date | check_in_date | checkout_date | no_guests | room_category | booking_platform | ratings_given | booking_status | revenue_ge |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | May012216558RT12 | 16558 | 2022-04-30 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 3 | May012216558RT14 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 5 | May012216558RT16 | 16558 | 2022-05-01 | 2022-05-01 | 2022-05-03 | 2 | RT1 | others | 4.0 | Checked Out | |

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```
df_booking.shape
```

[12] ✓ 0.1s Python

```
(134590, 12)
```

Click here to ask Blackbox to help you code faster

```
df_booking.room_category.unique()
```

[13] ✓ 0.0s Python

```
array(['RT1', 'RT2', 'RT3', 'RT4'], dtype=object)
```

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```
df_booking.booking_platform.unique()
```

[14] ✓ 0.0s Python

```
array(['direct online', 'others', 'logtrip', 'tripster', 'makeyourtrip',
       'journey', 'direct offline'], dtype=object)
```

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```
df_booking.booking_platform.value_counts()
```

[15] ✓ 0.0s Python

```
booking_platform
others           55066
makeyourtrip     26898
logtrip          14756
direct online    13379
tripster          9630
journey           8106
direct offline    6755
Name: count, dtype: int64
```

+ Code + Markdown | Run All Restart Clear All Outputs | Variables Outline ... base (Python)

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```
import matplotlib.pyplot as plt
```

[21] ✓ 0.0s Python

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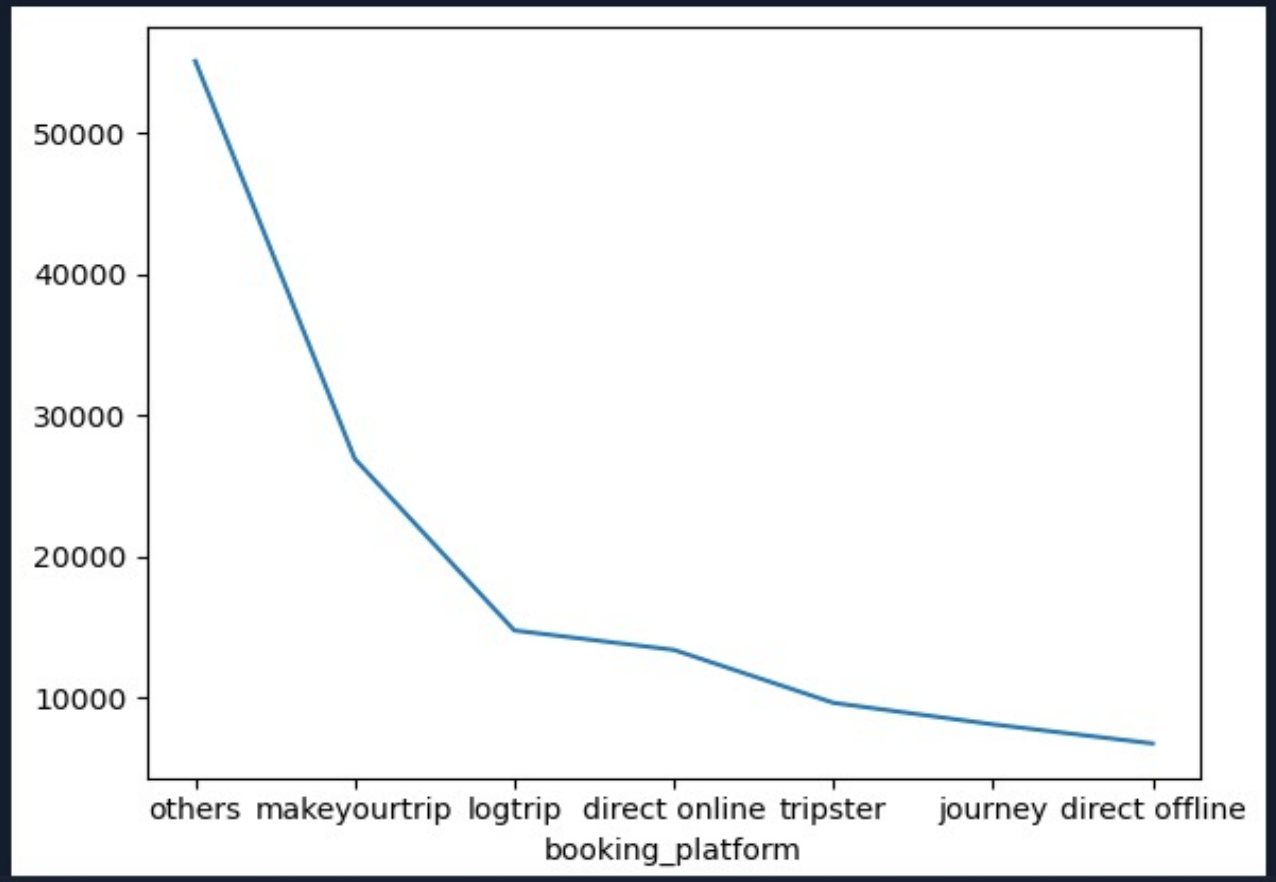
```
df_booking.booking_platform.value_counts().plot(kind = "line")
```

[105] ✓ 0.3s Python

```
<Axes: xlabel='booking_platform'>
```



Click here to ask Blackbox to help you code faster

```
df_booking.describe()
```

[18] ✓ 0.1s Python

| | property_id | no_guests | ratings_given | revenue_generated | revenue_realized |
|---|---|---|---|---|---|
| count | 134590.000000 | 134590.000000 | 56683.000000 | 134590.000000 | 134590.000000 |
| mean | 18061.113493 | 2.036808 | 3.619004 | 14916.013188 | 12696.123256 |
| std | 1093.055847 | 1.031766 | 1.235009 | 6452.868072 | 6928.108124 |
| min | 16558.000000 | 1.000000 | 1.000000 | 6500.000000 | 2600.000000 |
| 25% | 17558.000000 | 1.000000 | 3.000000 | 9900.000000 | 7600.000000 |
| 50% | 17564.000000 | 2.000000 | 4.000000 | 13500.000000 | 11700.000000 |
| 75% | 18563.000000 | 2.000000 | 5.000000 | 18000.000000 | 15300.000000 |
| max | 19563.000000 | 6.000000 | 5.000000 | 45220.000000 | 45220.000000 |

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```
df_booking.revenue_generated.min() , df_booking.revenue_generated.max()
```

[25] ✓ 0.0s Python

```
(6500, 45220)
```

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```
df_date= pd.read_csv('../Hotel_Project.py/dim_date.csv')
df_hotels=pd.read_csv('../Hotel_Project.py/dim_hotels.csv')
df_rooms=pd.read_csv('../Hotel_Project.py/dim_rooms.csv')
df_agg_bookings=pd.read_csv('../Hotel_Project.py/fact_aggregated_bookings.csv')
```

[32] ✓ 0.0s Python

[32] ✓ 0.0s Python

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```
df_hotels.shape
```

[33] ✓ 0.0s Python

```
(25, 4)
```

Click here to ask Blackbox to help you code faster

```
df_hotels.head(5)
```

[34] ✓ 0.0s Python

| | property_id | property_name | category | city |
|---|---|---|---|---|
| 0 | 16558 | Atliq Grands | Luxury | Delhi |
| 1 | 16559 | Atliq Exotica | Luxury | Mumbai |
| 2 | 16560 | Atliq City | Business | Delhi |
| 3 | 16561 | Atliq Blu | Luxury | Delhi |
| 4 | 16562 | Atliq Bay | Luxury | Delhi |

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```
df_hotels.category.value_counts()
```

[35] ✓ 0.0s Python

```
category
Luxury      16
Business     9
Name: count, dtype: int64
```

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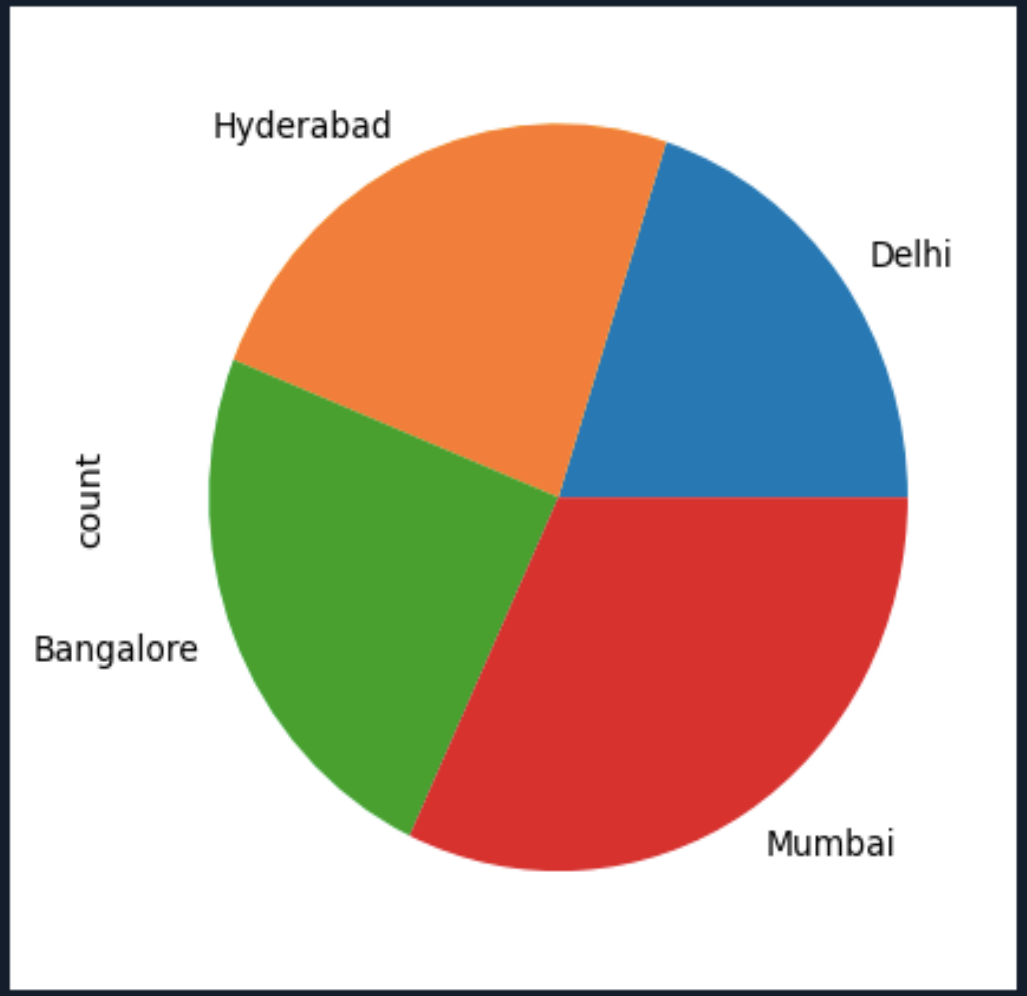
```
df_hotels.city.value_counts().sort_values().plot(kind='pie')
```

[104] ✓ 0.3s

```
<Axes: ylabel='count'>
```



# Aggregate Bookings

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```
df_agg_bookings.head(5)
```

[37] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity |
|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 |
| 1 | 19562 | 01-May-22 | RT1 | 28 | 30 |
| 2 | 19563 | 01-May-22 | RT1 | 23 | 30 |
| 3 | 17558 | 01-May-22 | RT1 | 13 | 19 |
| 4 | 16558 | 01-May-22 | RT1 | 18 | 19 |

# Find out unique property ids in aggregate bookings dataset

Click here to ask Blackbox to help you code faster

```
df_agg_bookings.property_id.unique()
```

[38] ✓ 0.0s Python

```
array([16559, 19562, 19563, 17558, 16558, 17560, 19558, 19560, 17561,
       16560, 16561, 16562, 16563, 17559, 17562, 17563, 18558, 18559,
       18561, 18562, 18563, 19559, 19561, 17564, 18560])
```

# Find out total bookings per property_id

Click here to ask Blackbox to help you code faster

```
df_agg_bookings.groupby("property_id")["successful_bookings"].sum()
```

[39] ✓ 0.0s Python

```
property_id
16558    3153
16559    7338
16560    4693
16561    4418
16562    4820
16563    7147
17558    5036
17559    6142
17560    6013
17561    5183
17562    3424
17563    6337
17564    3982
18558    4475
18559    5256
18560    6638
18561    6458
18562    7333
18563    4728
19558    4371
19559    4705
19560    5979
19561    5736
19562    5812
19563    5413
Name: successful_bookings, dtype: int64
```

# Find out days on which bookings are less than capacity

```
Click here to ask Blackbox to help you code faster
df_agg_bookings[ df_agg_bookings.successful_bookings < df_agg_bookings.capacity ]
df_agg_bookings.head(5)
```

[82] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity |
|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 |
| 1 | 19562 | 01-May-22 | RT1 | 28 | 30 |
| 2 | 19563 | 01-May-22 | RT1 | 23 | 30 |
| 3 | 17558 | 01-May-22 | RT1 | 13 | 19 |
| 4 | 16558 | 01-May-22 | RT1 | 18 | 19 |

# Find out properties that have highest capacity

```
Click here to ask Blackbox to help you code faster
df_agg_bookings.capacity.max()
```

[44] ✓ 0.0s Python

```
50
```

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```
df_booking[df_booking.no_guests >0]
```

[53] ✓ 0.0s Python

| | booking_id | property_id | booking_date | check_in_date | checkout_date | no_guests | room_category | booking_platform | ratings_given | booking_status | reven |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | May012216558RT11 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 3 | RT1 | direct online | 1.0 | Checked Out | |
| 1 | May012216558RT12 | 16558 | 2022-04-30 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 2 | May012216558RT13 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-04 | 2 | RT1 | logtrip | 5.0 | Checked Out | |
| 3 | May012216558RT14 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 4 | May012216558RT15 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 4 | RT1 | direct online | 5.0 | Checked Out | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 134585 | Jul312217564RT46 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-03 | 1 | RT4 | makeyourtrip | 2.0 | Checked Out | |
| 134586 | Jul312217564RT47 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-01 | 4 | RT4 | logtrip | 2.0 | Checked Out | |
| 134587 | Jul312217564RT48 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-02 | 1 | RT4 | tripster | NaN | Cancelled | |
| 134588 | Jul312217564RT49 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-01 | 2 | RT4 | logtrip | 2.0 | Checked Out | |
| 134589 | Jul312217564RT410 | 17564 | 2022-07-31 | 2022-07-31 | 2022-08-01 | 2 | RT4 | makeyourtrip | NaN | Cancelled | |

134590 rows × 12 columns

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```
df_booking.shape
```

[54] ✓ 0.0s Python

```
(134590, 12)
```

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```
df_booking.revenue_generated.min() , df_booking.revenue_generated.max()
```

[56] ✓ 0.0s Python

```
(6500, 45220)
```

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```
df_booking[df_booking.no_guests >0]
```

[53] ✓ 0.0s Python

| | booking_id | property_id | booking_date | check_in_date | checkout_date | no_guests | room_category | booking_platform | ratings_given | booking_status | reven |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | May012216558RT11 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 3 | RT1 | direct online | 1.0 | Checked Out | |
| 1 | May012216558RT12 | 16558 | 2022-04-30 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 2 | May012216558RT13 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-04 | 2 | RT1 | logtrip | 5.0 | Checked Out | |
| 3 | May012216558RT14 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 4 | May012216558RT15 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 4 | RT1 | direct online | 5.0 | Checked Out | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 134585 | Jul312217564RT46 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-03 | 1 | RT4 | makeyourtrip | 2.0 | Checked Out | |
| 134586 | Jul312217564RT47 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-01 | 4 | RT4 | logtrip | 2.0 | Checked Out | |
| 134587 | Jul312217564RT48 | 17564 | 2022-07-30 | 2022-07-31 | 2022-08-02 | 1 | RT4 | tripster | NaN | Cancelled | |
| 134588 | Jul312217564RT49 | 17564 | 2022-07-29 | 2022-07-31 | 2022-08-01 | 2 | RT4 | logtrip | 2.0 | Checked Out | |
| 134589 | Jul312217564RT410 | 17564 | 2022-07-31 | 2022-07-31 | 2022-08-01 | 2 | RT4 | makeyourtrip | NaN | Cancelled | |

134590 rows × 12 columns

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```
df_booking.shape
```

[54] ✓ 0.0s Python

```
(134590, 12)
```

Click here to ask Blackbox to help you code faster

```
df_booking.revenue_generated.min() , df_booking.revenue_generated.max()
```

[56] ✓ 0.0s Python

```
(6500, 45220)
```

# In aggregate bookings find columns that have null values. Fill these null values with

whatever you think is the appropriate subtitute (possible ways is to use mean or median)

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```
df_agg_bookings.isnull().sum()
```

[78] ✓ 0.0s Python

```
property_id           0
check_in_date         0
room_category         0
successful_bookings   0
capacity              0
dtype: int64
```

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```
df_agg_bookings=df_agg_bookings.fillna(df_agg_bookings.capacity.mean())
df_agg_bookings
```

[79] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity |
|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 |
| 1 | 19562 | 01-May-22 | RT1 | 28 | 30 |
| 2 | 19563 | 01-May-22 | RT1 | 23 | 30 |
| 3 | 17558 | 01-May-22 | RT1 | 13 | 19 |
| 4 | 16558 | 01-May-22 | RT1 | 18 | 19 |
| ... | ... | ... | ... | ... | ... |
| 9195 | 16563 | 31-Jul-22 | RT4 | 13 | 18 |
| 9196 | 16559 | 31-Jul-22 | RT4 | 13 | 18 |
| 9197 | 17558 | 31-Jul-22 | RT4 | 3 | 6 |

# In aggregate bookings find out records that have successful_bookings value greater than

capacity. Filter those records

```
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df_agg_bookings[df_agg_bookings.successful_bookings >= df_agg_bookings.capacity]
```

[85] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity |
|---|---|---|---|---|---|
| 24 | 19562 | 01-May-22 | RT2 | 23 | 23 |
| 29 | 16561 | 01-May-22 | RT2 | 24 | 24 |
| 60 | 16561 | 01-May-22 | RT3 | 21 | 21 |
| 69 | 16558 | 01-May-22 | RT3 | 8 | 8 |
| 99 | 16558 | 01-May-22 | RT4 | 3 | 3 |
| ... | ... | ... | ... | ... | ... |
| 7699 | 16558 | 16-Jul-22 | RT4 | 3 | 3 |
| 7999 | 16558 | 19-Jul-22 | RT4 | 3 | 3 |
| 8399 | 16558 | 23-Jul-22 | RT4 | 3 | 3 |
| 8499 | 16558 | 24-Jul-22 | RT4 | 3 | 3 |
| 9099 | 16558 | 30-Jul-22 | RT4 | 3 | 3 |

112 rows × 5 columns

# Data Transformation

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```
df_agg_bookings.head()
```

[86] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity |
|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 |
| 1 | 19562 | 01-May-22 | RT1 | 28 | 30 |
| 2 | 19563 | 01-May-22 | RT1 | 23 | 30 |
| 3 | 17558 | 01-May-22 | RT1 | 13 | 19 |
| 4 | 16558 | 01-May-22 | RT1 | 18 | 19 |

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```
df_booking.info()
```

[88] ✓ 0.1s Python

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 134590 entries, 0 to 134589
Data columns (total 12 columns):
 #   Column            Non-Null Count   Dtype
---  ------            --------------   -----
 0   booking_id        134590 non-null  object
 1   property_id       134590 non-null  int64
 2   booking_date      134590 non-null  object
 3   check_in_date     134590 non-null  object
 4   checkout_date     134590 non-null  object
 5   no_guests         134590 non-null  int64
 6   room_category     134590 non-null  object
 7   booking_platform  134590 non-null  object
 8   ratings_given     56683 non-null   float64
 9   booking_status    134590 non-null  object
```

# Insights Generation

**1. What is an average occupancy rate in each of room categories?**

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```
df_agg_bookings.groupby("room_category")["occ_pct"].mean().round(2)
```

[ ] Python

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```
df_hotels.head()
```

[90] ✓ 0.0s Python

| | property_id | property_name | category | city |
|---|---|---|---|---|
| 0 | 16558 | Atliq Grands | Luxury | Delhi |
| 1 | 16559 | Atliq Exotica | Luxury | Mumbai |
| 2 | 16560 | Atliq City | Business | Delhi |
| 3 | 16561 | Atliq Blu | Luxury | Delhi |
| 4 | 16562 | Atliq Bay | Luxury | Delhi |

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```
import pandas as pd
```

[91] ✓ 0.0s Python

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```
df=pd.merge(df_agg_bookings,df_hotels , on="property_id")
df.head(4)
```

[92] ✓ 0.0s Python

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```
df=pd.merge(df_agg_bookings,df_hotels , on="property_id")
df.head(4)
```

[92] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity | property_name | category | city |
|---|---|---|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 | Atliq Exotica | Luxury | Mumbai |
| 1 | 16559 | 01-May-22 | RT2 | 35 | 41 | Atliq Exotica | Luxury | Mumbai |
| 2 | 16559 | 01-May-22 | RT3 | 27 | 32 | Atliq Exotica | Luxury | Mumbai |
| 3 | 16559 | 01-May-22 | RT4 | 17 | 18 | Atliq Exotica | Luxury | Mumbai |

### 3. When was the occupancy better? Weekday or Weekend?

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```
df.head()
```

[98] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity | property_name | category | city |
|---|---|---|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 | Atliq Exotica | Luxury | Mumbai |
| 1 | 16559 | 01-May-22 | RT2 | 35 | 41 | Atliq Exotica | Luxury | Mumbai |
| 2 | 16559 | 01-May-22 | RT3 | 27 | 32 | Atliq Exotica | Luxury | Mumbai |
| 3 | 16559 | 01-May-22 | RT4 | 17 | 18 | Atliq Exotica | Luxury | Mumbai |
| 4 | 16559 | 02-May-22 | RT1 | 20 | 30 | Atliq Exotica | Luxury | Mumbai |

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```
df_date
```

[99] ✓ 0.0s Python

| | date | mmm yy | week no | day_type |
|---|---|---|---|---|
| 0 | 01-May-22 | May 22 | W 19 | weekend |

```
df=pd.merge(df , df_date , left_on="check_in_date" , right_on="date")
df.head()
```

[100] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity | property_name | category | city | date | mmm yy | week no | day_type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 1 | 16559 | 01-May-22 | RT2 | 35 | 41 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 2 | 16559 | 01-May-22 | RT3 | 27 | 32 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 3 | 16559 | 01-May-22 | RT4 | 17 | 18 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 4 | 19562 | 01-May-22 | RT1 | 28 | 30 | Atliq Bay | Luxury | Bangalore | 01-May-22 | May 22 | W 19 | weekend |

### 4. In the month of june, what is the occupancy for diffrent cities



```
df.head()
```

[101] ✓ 0.0s Python

| | property_id | check_in_date | room_category | successful_bookings | capacity | property_name | category | city | date | mmm yy | week no | day_type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16559 | 01-May-22 | RT1 | 25 | 30 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 1 | 16559 | 01-May-22 | RT2 | 35 | 41 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 2 | 16559 | 01-May-22 | RT3 | 27 | 32 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 3 | 16559 | 01-May-22 | RT4 | 17 | 18 | Atliq Exotica | Luxury | Mumbai | 01-May-22 | May 22 | W 19 | weekend |
| 4 | 19562 | 01-May-22 | RT1 | 28 | 30 | Atliq Bay | Luxury | Bangalore | 01-May-22 | May 22 | W 19 | weekend |



```
df["mmm yy"].unique()
```

[102] ✓ 0.0s Python

```
array(['May 22', 'Jun 22', 'Jul 22'], dtype=object)
```

```
df_june_22 = df[df["mmm yy"]=="jun 22"]
df_june_22.head(4)
```

[103] ✓ 0.0s Python

| property_id | check_in_date | room_category | successful_bookings | capacity | property_name | category | city | date | mmm yy | week no | day_type |
|---|---|---|---|---|---|---|---|---|---|---|---|

Click here to ask Blackbox to help you code faster

```
df_booking.head()
```

[106] ✓ 0.0s Python

| | booking_id | property_id | booking_date | check_in_date | checkout_date | no_guests | room_category | booking_platform | ratings_given | booking_status | revenue_ge |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | May012216558RT11 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 3 | RT1 | direct online | 1.0 | Checked Out | |
| 1 | May012216558RT12 | 16558 | 2022-04-30 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 2 | May012216558RT13 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-04 | 2 | RT1 | logtrip | 5.0 | Checked Out | |
| 3 | May012216558RT14 | 16558 | 2022-04-28 | 2022-05-01 | 2022-05-02 | 2 | RT1 | others | NaN | Cancelled | |
| 4 | May012216558RT15 | 16558 | 2022-04-27 | 2022-05-01 | 2022-05-02 | 4 | RT1 | direct online | 5.0 | Checked Out | |

Click here to ask Blackbox to help you code faster

```
df_booking["property_name"].unique()
```

[ ] Python

Click here to ask Blackbox to help you code faster

```
df_booking.describe()
```

[111] ✓ 0.1s Python

| | property_id | no_guests | ratings_given | revenue_generated | revenue_realized |
|---|---|---|---|---|---|
| count | 134590.000000 | 134590.000000 | 56683.000000 | 134590.000000 | 134590.000000 |
| mean | 18061.113493 | 2.036808 | 3.619004 | 14916.013188 | 12696.123256 |
| std | 1093.055847 | 1.031766 | 1.235009 | 6452.868072 | 6928.108124 |

```
df_agg_bookings.describe()
```

[112] ✓ 0.0s Python

| | property_id | successful_bookings | capacity |
|---|---|---|---|
| count | 9200.000000 | 9200.000000 | 9200.000000 |
| mean | 18040.640000 | 14.629348 | 25.280000 |
| std | 1099.818325 | 7.591770 | 11.440971 |
| min | 16558.000000 | 1.000000 | 3.000000 |
| 25% | 17558.000000 | 9.000000 | 18.000000 |
| 50% | 17564.000000 | 14.000000 | 25.000000 |
| 75% | 18563.000000 | 19.000000 | 34.000000 |
| max | 19563.000000 | 43.000000 | 50.000000 |



```
df_booking.info()
```

[113] ✓ 0.0s Python

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 134590 entries, 0 to 134589
Data columns (total 12 columns):
 #   Column             Non-Null Count   Dtype
---  ------             --------------   -----
 0   booking_id         134590 non-null  object
 1   property_id        134590 non-null  int64
 2   booking_date       134590 non-null  object
 3   check_in_date      134590 non-null  object
 4   checkout_date      134590 non-null  object
 5   no_guests          134590 non-null  int64
 6   room_category      134590 non-null  object
 7   booking_platform   134590 non-null  object
 8   ratings_given      56683 non-null   float64
 9   booking_status     134590 non-null  object
 10  revenue_generated  134590 non-null  int64
```