Exploratory Data Analysis (EDA)

Hospitality Domain 🏨📊

Project Summary

📝 **Project Summary:** EDA on Hospitality Domain 🏨📊 Welcome to the EDA Project on Atliq Grands Hospitality Data! 🌟 This project analyses booking trends, cancellationons, and revenue across various hotels under the Atliq brand.

Hotels under the Atliq brand.

🏢 **Atliq Seasons** | 🏝️ **Atliq Exotica** | 🌊 **Atliq Bay** | 🏰 **Atliq Palace**

Each hotel offers a variety of room types:

🛏️ **Standard** | 🛋️ **Elite** | 🏆 **Premium** | 👑 **Presidential**

1️⃣ **Booking Trends & Patterns:** Analyzed seasonal and platform-specific booking behaviors.

2️⃣ **Revenue Insights: Identified cities and properties facing revenue decline.**

3️⃣ **Occupancy Analysis: Evaluated occupancy rates to uncover optimization opportunities.**

4️⃣ **Cancellations: Examined the impact of cancellations on overall performance.**

What is an average occupancy rate in each of the room categories?

```
df.groupby('room_class')['occ_pct'].mean().round(2)
```
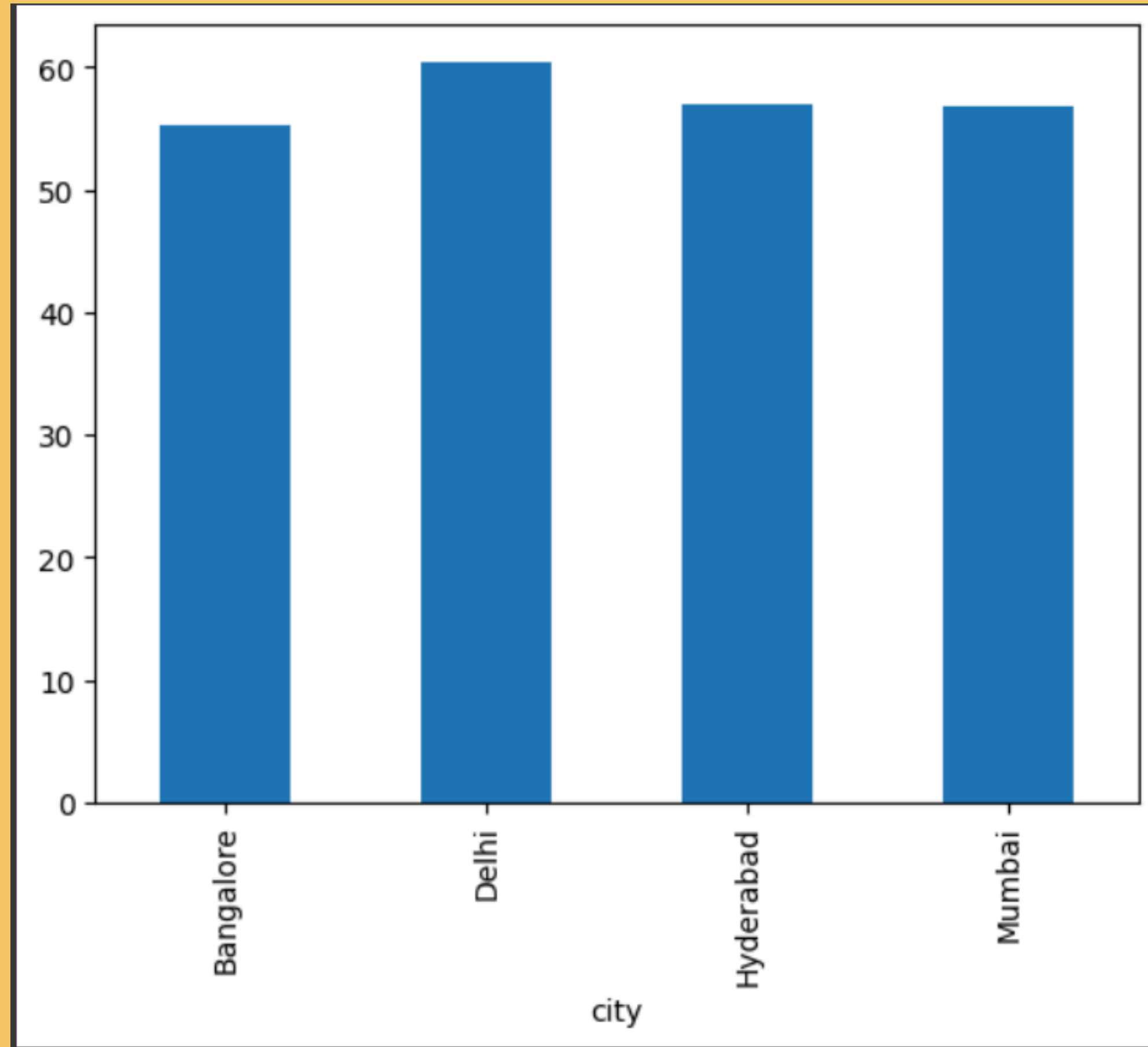
	occ_pct
room_class	
Elite	58.04
Premium	58.03
Presidential	59.29
Standard	57.94

Print average occupancy rate per city

When was the occupancy better? Weekday or Weekend?

```
df.groupby('day_type')['occ_pct'].mean().round(2)
```

	occ_pct
day_type	
weekeday	50.90
weekend	72.39

Print month-by-month revenue

```
[155] df_bookings_all.groupby("mmm yy")["revenue_realized"].sum()
```

	revenue_realized
mmm yy	
Jul 22	243180932
Jun 22	229637640
May 22	234353183

Print a pie chart of revenue realized per booking platform