**AtliQ Hospitality Analysis Code and Output Screenshot**

**Code: -**

import pandas as pd

# Function to load data

def load\_data(base\_path):

dim\_date = pd.read\_csv(f'{base\_path}/dim\_date.csv')

dim\_hotels = pd.read\_csv(f'{base\_path}/dim\_hotels.csv')

dim\_rooms = pd.read\_csv(f'{base\_path}/dim\_rooms.csv')

fact\_aggregated\_bookings = pd.read\_csv(f'{base\_path}/fact\_aggregated\_bookings.csv')

fact\_bookings = pd.read\_csv(f'{base\_path}/fact\_bookings.csv')

return dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings

# Function to clean data

def clean\_data(dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings):

# Convert date columns to datetime

dim\_date['date'] = pd.to\_datetime(dim\_date['date'], format='%d-%b-%y')

fact\_bookings['booking\_date'] = pd.to\_datetime(fact\_bookings['booking\_date'], format='%d-%m-%Y')

fact\_bookings['checkout\_date'] = pd.to\_datetime(fact\_bookings['checkout\_date'], format='%d-%m-%Y')

fact\_bookings['check\_in\_date'] = pd.to\_datetime(fact\_bookings['check\_in\_date'], format='%d-%m-%Y')

return dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings

# Function to analyze metrics

def analyze\_metrics(fact\_bookings, fact\_aggregated\_bookings):

# Compute metrics

revenue\_generated = fact\_bookings['revenue\_generated'].sum()

total\_bookings = len(fact\_bookings)

average\_rating = fact\_bookings['ratings\_given'].mean()

total\_capacity = fact\_aggregated\_bookings['capacity'].sum()

total\_successful\_bookings = fact\_aggregated\_bookings['successful\_bookings'].sum()

occupancy\_percentage = total\_successful\_bookings / total\_capacity

total\_cancelled\_bookings = len(fact\_bookings[fact\_bookings['booking\_status'] == 'Cancelled'])

cancellation\_rate = total\_cancelled\_bookings / total\_bookings

return revenue\_generated, total\_bookings, average\_rating, total\_capacity, total\_successful\_bookings, occupancy\_percentage, total\_cancelled\_bookings, cancellation\_rate

# Main function

def main():

base\_path = 'C:/Users/LENOVO/Videos/Dataset' # Update with your dataset folder path

dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings = load\_data(base\_path)

# Clean data

dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings = clean\_data(dim\_date, dim\_hotels, dim\_rooms, fact\_aggregated\_bookings, fact\_bookings)

# Analyze metrics

revenue\_generated, total\_bookings, average\_rating, total\_capacity, total\_successful\_bookings, occupancy\_percentage, total\_cancelled\_bookings, cancellation\_rate = analyze\_metrics(fact\_bookings, fact\_aggregated\_bookings)

# Print results

print("Metrics Visualization Placeholder")

print(f"Revenue: ₹{revenue\_generated}")

print(f"Total Bookings: {total\_bookings}")

print(f"Average Rating: {average\_rating}")

print(f"Total Capacity: {total\_capacity}")

print(f"Total Successful Bookings: {total\_successful\_bookings}")

print(f"Occupancy %: {occupancy\_percentage}")

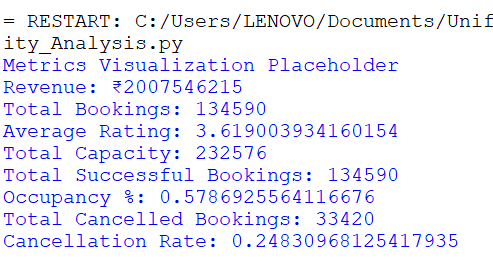
print(f"Total Cancelled Bookings: {total\_cancelled\_bookings}")

print(f"Cancellation Rate: {cancellation\_rate}")

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Output: -**

****