

✓ Exploratory Summary stats & Insights behavior patterns

```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings('ignore')
df = pd.read_csv('travel_data.csv')

print("=== Summary Statistics ===")

sns.set(style="whitegrid")
fig, axs = plt.subplots(3, 2, figsize=(14, 12))

sns.countplot(x='device_type', hue='booking_made', data=df, ax=axs[0, 0])
axs[0, 0].set_title("Device Type vs Booking Made")

sns.countplot(x='clicked_offer', hue='booking_made', data=df, ax=axs[0, 1])
axs[0, 1].set_title("Clicked Offer vs Booking Made")
axs[0, 1].set_xticklabels(['No', 'Yes'])

sns.countplot(x='travel_dates_flexibility', hue='booking_made', data=df, ax=axs[1, 0])
axs[1, 0].set_title("Travel Flexibility vs Booking")
axs[1, 0].set_xticklabels(['No', 'Yes'])

sns.boxplot(x='booking_made', y='pages_visited', data=df, ax=axs[1, 1])
axs[1, 1].set_title("Pages Visited vs Booking Made")
axs[1, 1].set_xticklabels(['No', 'Yes'])

df['search_origin'].value_counts().head().plot(kind='bar', ax=axs[2, 0], color='skyblue')
axs[2, 0].set_title("Top 5 Search Origins")

df['search_destination'].value_counts().head().plot(kind='bar', ax=axs[2, 1], color='orange')
axs[2, 1].set_title("Top 5 Search Destinations")

plt.tight_layout()

print('\n\n Exploratory Data Analysis  in visualization form \n\n')

plt.show()
```

Exploratory Data Analysis in visualization form

