In [1]:
```
!pip install pandas openpyxl
```

```
Requirement already satisfied: pandas in c:\users\shrut\anaconda3\lib\site-packag
es (2.2.2)
Requirement already satisfied: openpyxl in c:\users\shrut\anaconda3\lib\site-pack
ages (3.1.5)
Requirement already satisfied: numpy>=1.26.0 in c:\users\shrut\anaconda3\lib\site
-packages (from pandas) (1.26.4)
Requirement already satisfied: python-dateutil>=2.8.2 in c:\users\shrut\anaconda3
\lib\site-packages (from pandas) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in c:\users\shrut\anaconda3\lib\site-
packages (from pandas) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in c:\users\shrut\anaconda3\lib\sit
e-packages (from pandas) (2023.3)
Requirement already satisfied: et-xmlfile in c:\users\shrut\anaconda3\lib\site-pa
ckages (from openpyxl) (1.1.0)
Requirement already satisfied: six>=1.5 in c:\users\shrut\anaconda3\lib\site-pack
ages (from python-dateutil>=2.8.2->pandas) (1.16.0)
```

In [2]:
```
import pandas as pd
```

In [3]:
```
df = pd.read_excel("Uber_Cleaned.xlsx")
```

In [4]:
```
df.head()
```

Out[4]:

	Request id	Pickup point	Driver id	Status	Request timestamp	Drop timestamp	Hour	Time Slot	Comple
0	619	Airport	1.0	Trip Completed	2016-07-11 11:51:00	2016-07-11 13:00:00	11	Morning	
1	867	Airport	1.0	Trip Completed	2016-07-11 17:57:00	2016-07-11 18:47:00	17	Evening	
2	1807	City	1.0	Trip Completed	2016-07-12 09:17:00	2016-07-12 09:58:00	9	Morning	
3	2532	Airport	1.0	Trip Completed	2016-07-12 21:08:00	2016-07-12 22:03:00	21	Night	
4	3112	City	1.0	Trip Completed	2016-07-13 08:33:16	2016-07-13 09:25:47	8	Early Morning	

In [5]:
```
import sqlite3
```

create a sqlite3 database in memory or as a file

In [6]:
```
conn = sqlite3.connect("Uber_Cleaned.db")#this creates a file- based DB
```

write dateframe into sqlite as a table

In [7]:
```
df.to_sql("uber_data", conn, if_exists="replace", index=False)
```

Out[7]:
```
6745
```

let us confirm that the data is loaded

In [8]:
```
query = "SELECT * FROM uber_data LIMIT 5"
```

In [9]:
```
result = pd.read_sql_query(query, conn)

print(result)
```

```
   Request id Pickup point  Driver id          Status    Request timestamp  \
0         619      Airport        1.0  Trip Completed  2016-07-11 11:51:00   
1         867      Airport        1.0  Trip Completed  2016-07-11 17:57:00   
2        1807         City        1.0  Trip Completed  2016-07-12 09:17:00   
3        2532      Airport        1.0  Trip Completed  2016-07-12 21:08:00   
4        3112         City        1.0  Trip Completed  2016-07-13 08:33:16   

        Drop timestamp  Hour      Time Slot Trip Completed ?  
0  2016-07-11 13:00:00    11        Morning              Yes  
1  2016-07-11 18:47:00    17        Evening              Yes  
2  2016-07-12 09:58:00     9        Morning              Yes  
3  2016-07-12 22:03:00    21          Night              Yes  
4  2016-07-13 09:25:47     8  Early Morning              Yes  
```

using sql count the no. of rows

In [10]:
```
pd.read_sql_query("SELECT COUNT(*) FROM uber_data", conn)
```

Out[10]:

	COUNT(*)
0	6745

Unique Pickup Points

In [11]:
```
pd.read_sql_query("SELECT DISTINCT [Pickup point] FROM uber_data", conn)
```

Out[11]:

	Pickup point
0	Airport
1	City

Top Pickup Points by Trip Count

In [12]:
```
query = """SELECT [Pickup point], COUNT (*) AS [trip count] FROM uber_data GROUP
```

Top Pickup Points by Trip Count

In [13]:
```
pd.read_sql_query(query, conn)
```

Out[13]:

	Pickup point	trip count
0	City	3507
1	Airport	3238

How many total trips were completed, cancelled, or had no cars available?

In [14]:
```
query = """SELECT [Status], COUNT (*) AS [Trip Count] FROM uber_data GROUP BY [S
```

In [15]:
```
pd.read_sql_query(query, conn)
```

Out[15]:

	Status	Trip Count
0	Trip Completed	2831
1	No Cars Available	2650
2	Cancelled	1264

Which pickup point had the most cancelled trips?

In [16]:
```
query = """
SELECT [Pickup point], COUNT(*) AS "Cancelled Trips"
FROM uber_data
WHERE Status = 'Cancelled'
GROUP BY [Pickup point]
ORDER BY "Cancelled Trips" DESC
"""
pd.read_sql_query(query, conn)
```

Out[16]:

	Pickup point	Cancelled Trips
0	City	1066
1	Airport	198

In [17]:
```
df.columns
```

Out[17]:
```
Index(['Request id', 'Pickup point', 'Driver id', 'Status',
       'Request timestamp', 'Drop timestamp', 'Hour', 'Time Slot',
       'Trip Completed ?'],
      dtype='object')
```

How many trips were requested in each hour of the day?

In [18]:
```
query = """ SELECT [Hour], COUNT(*) AS [Total Trips] FROM uber_data GROUP BY [Ho

pd.read_sql_query(query, conn)
```

Out[18]:

	Hour	Total Trips
0	0	99
1	1	85
2	2	99
3	3	92
4	4	203
5	5	445
6	6	398
7	7	406
8	8	423
9	9	431
10	10	243
11	11	171
12	12	184
13	13	160
14	14	136
15	15	171
16	16	159
17	17	418
18	18	510
19	19	473
20	20	492
21	21	449
22	22	304
23	23	194

Which time slot had the highest number of trip requests?

In [19]:
```
query = """SELECT [Time Slot], COUNT(*) AS [Trip count] FROM uber_data GROUP BY

pd.read_sql_query(query, conn)
```

Out[19]:

	Time Slot	Trip count
0	Evening	1893
1	Early Morning	1672
2	Night	947
3	Morning	845
4	Afternoon	810
5	Late Night	578

Which time slot had the highest number of trip requests?

In [20]:
```
query = """SELECT [Time Slot], [Status], COUNT(*) AS [Trip Count] FROM uber_data
pd.read_sql_query(query, conn)
```

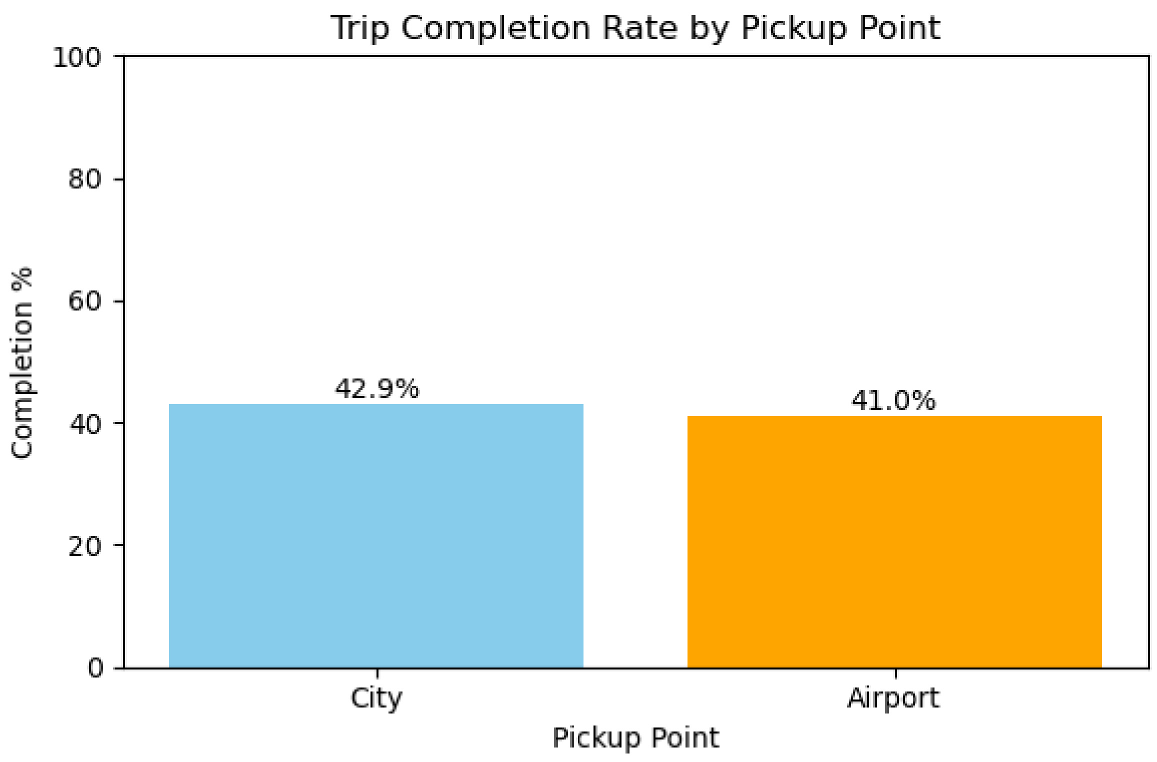
Out[20]:

	Time Slot	Status	Trip Count
0	Afternoon	Trip Completed	491
1	Afternoon	No Cars Available	228
2	Afternoon	Cancelled	91
3	Early Morning	Trip Completed	681
4	Early Morning	Cancelled	668
5	Early Morning	No Cars Available	323
6	Evening	No Cars Available	1127
7	Evening	Trip Completed	642
8	Evening	Cancelled	124
9	Late Night	No Cars Available	299
10	Late Night	Trip Completed	214
11	Late Night	Cancelled	65
12	Morning	Trip Completed	404
13	Morning	Cancelled	252
14	Morning	No Cars Available	189
15	Night	No Cars Available	484
16	Night	Trip Completed	399
17	Night	Cancelled	64

Which pickup point had the highest percentage of successful trips?

In [21]:
```
query = """SELECT [Pickup point], SUM(CASE WHEN [Status] = 'Trip Completed'THEN
completion_df = pd.read_sql_query(query, conn)
```

In [22]:
```
import matplotlib.pyplot as plt

# Step 1: Run the query and store the result
query = """
SELECT [Pickup point],
       SUM(CASE WHEN [Status] = 'Trip Completed' THEN 1 ELSE 0 END) * 100.0 / CO
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Completion %] DESC
"""
completion_df = pd.read_sql_query(query, conn)

# Step 2: Extract data for plotting
pickup_points = completion_df["Pickup point"]
completion_rates = completion_df["Completion %"]

# Step 3: Plot with matplotlib
plt.figure(figsize=(6, 4))
bars = plt.bar(pickup_points, completion_rates, color=['skyblue', 'orange'])

# Add value labels on top of bars
for bar in bars:
    yval = bar.get_height()
    plt.text(bar.get_x() + bar.get_width()/2, yval + 1, f"{yval:.1f}%", ha='cent

# Add titles and labels
plt.title("Trip Completion Rate by Pickup Point")
plt.xlabel("Pickup Point")
plt.ylabel("Completion %")
plt.ylim(0, 100)  # make the y-axis consistent for % values

# Show plot
plt.tight_layout()
plt.show()
```

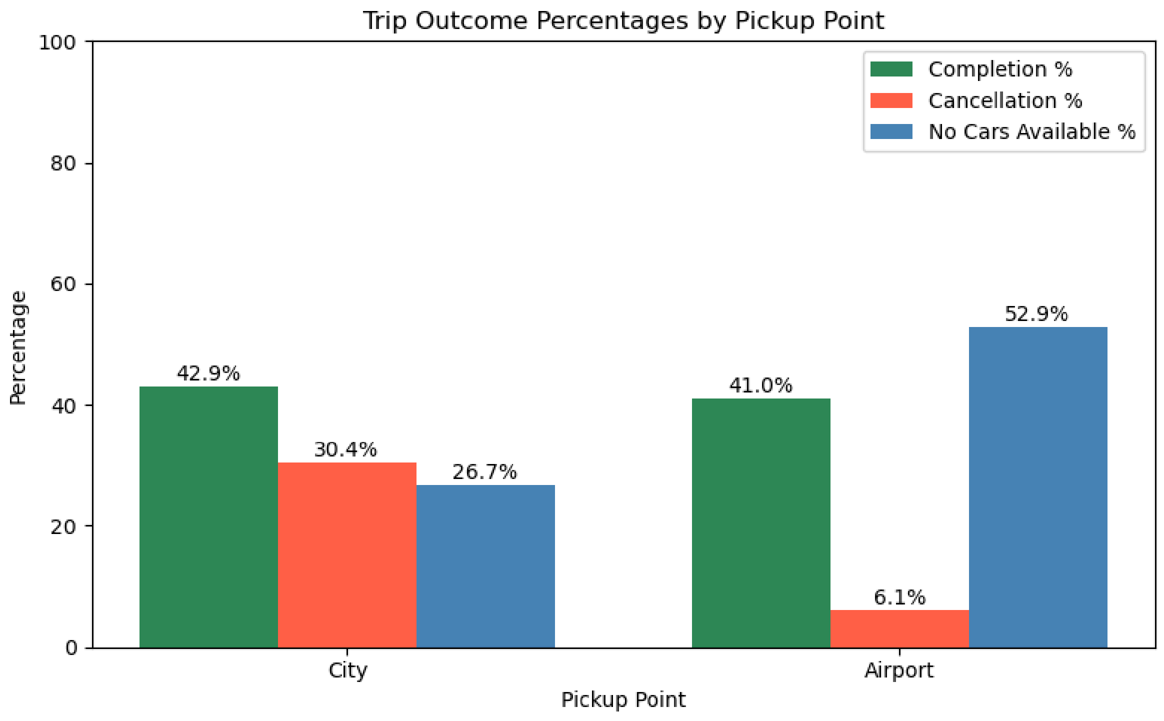


In [23]:
```
query = """
SELECT
  [Pickup point],
  SUM(CASE WHEN [Status] = 'Trip Completed' THEN 1 ELSE 0 END) * 100.0 / COUNT(*
  SUM(CASE WHEN [Status] = 'Cancelled' THEN 1 ELSE 0 END) * 100.0 / COUNT(*) AS
  SUM(CASE WHEN [Status] = 'No Cars Available' THEN 1 ELSE 0 END) * 100.0 / COUN
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Completion %] DESC
"""

pd.read_sql_query(query, conn)
```

Out[23]:

	Pickup point	Completion %	Cancellation %	No Cars Available %
0	City	42.885657	30.396350	26.717993
1	Airport	40.982088	6.114886	52.903027

In [24]:
```
import matplotlib.pyplot as plt
import pandas as pd

# Run your query and store result
query = """
SELECT
  [Pickup point],
  SUM(CASE WHEN [Status] = 'Trip Completed' THEN 1 ELSE 0 END) * 100.0 / COUNT(*
  SUM(CASE WHEN [Status] = 'Cancelled' THEN 1 ELSE 0 END) * 100.0 / COUNT(*) AS
  SUM(CASE WHEN [Status] = 'No Cars Available' THEN 1 ELSE 0 END) * 100.0 / COUN
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Completion %] DESC
"""

df_percent = pd.read_sql_query(query, conn)

# Extract X and Y
labels = df_percent["Pickup point"]
completion = df_percent["Completion %"]
cancelled = df_percent["Cancellation %"]
no_cars = df_percent["No Cars Available %"]

# Plot settings
x = range(len(labels))
width = 0.25  # width of each bar

# Create figure and axis
plt.figure(figsize=(8, 5))

# Plot each group of bars
plt.bar([i - width for i in x], completion, width=width, label='Completion %', c
plt.bar(x, cancelled, width=width, label='Cancellation %', color='tomato')
plt.bar([i + width for i in x], no_cars, width=width, label='No Cars Available %

# X-axis setup
plt.xticks(x, labels)
plt.xlabel("Pickup Point")
plt.ylabel("Percentage")
plt.title("Trip Outcome Percentages by Pickup Point")
plt.ylim(0, 100)
plt.legend()

# Display bar values
for i in x:
    plt.text(i - width, completion[i] + 1, f"{completion[i]:.1f}%", ha='center')
    plt.text(i, cancelled[i] + 1, f"{cancelled[i]:.1f}%", ha='center')
    plt.text(i + width, no_cars[i] + 1, f"{no_cars[i]:.1f}%", ha='center')

plt.tight_layout()
plt.show()
```



In [25]:
```
import pandas as pd
import matplotlib.pyplot as plt
import sqlite3
```

In [26]:
```
df = pd.read_excel("Uber_Cleaned.xlsx")
```

In [27]:
```
df
```

Out[27]:

	Request id	Pickup point	Driver id	Status	Request timestamp	Drop timestamp	Hour	Time Slot	Cor
0	619	Airport	1.0	Trip Completed	2016-07-11 11:51:00	2016-07-11 13:00:00	11	Morning	
1	867	Airport	1.0	Trip Completed	2016-07-11 17:57:00	2016-07-11 18:47:00	17	Evening	
2	1807	City	1.0	Trip Completed	2016-07-12 09:17:00	2016-07-12 09:58:00	9	Morning	
3	2532	Airport	1.0	Trip Completed	2016-07-12 21:08:00	2016-07-12 22:03:00	21	Night	
4	3112	City	1.0	Trip Completed	2016-07-13 08:33:16	2016-07-13 09:25:47	8	Early Morning	
...	...	...	...	...	...	...	...	...	
6740	6745	City	NaN	No Cars Available	2016-07-15 23:49:03	NaT	23	Night	
6741	6752	Airport	NaN	No Cars Available	2016-07-15 23:50:05	NaT	23	Night	
6742	6751	City	NaN	No Cars Available	2016-07-15 23:52:06	NaT	23	Night	
6743	6754	City	NaN	No Cars Available	2016-07-15 23:54:39	NaT	23	Night	
6744	6753	Airport	NaN	No Cars Available	2016-07-15 23:55:03	NaT	23	Night	

6745 rows × 9 columns

Prepare the Data. We need to convert the time column to a date for SQL to group properly: This adds a new column Request Date that contains only the date part. Many of our SQL charts (like daily cancellations or completion trend) need the date only — not the time. That's why we create "Request Date".

In [28]:
```
df['Request timestamp'] = pd.to_datetime(df['Request timestamp'], errors='coerce
df['Request Date'] = df['Request timestamp'].dt.date
```

In [29]:
```
df.head()
```

Out[29]:

	Request id	Pickup point	Driver id	Status	Request timestamp	Drop timestamp	Hour	Time Slot	Comple
0	619	Airport	1.0	Trip Completed	2016-07-11 11:51:00	2016-07-11 13:00:00	11	Morning	
1	867	Airport	1.0	Trip Completed	2016-07-11 17:57:00	2016-07-11 18:47:00	17	Evening	
2	1807	City	1.0	Trip Completed	2016-07-12 09:17:00	2016-07-12 09:58:00	9	Morning	
3	2532	Airport	1.0	Trip Completed	2016-07-12 21:08:00	2016-07-12 22:03:00	21	Night	
4	3112	City	1.0	Trip Completed	2016-07-13 08:33:16	2016-07-13 09:25:47	8	Early Morning	

Load Your Data into a SQL Database. Create a connection to a temporary in-memory SQL database

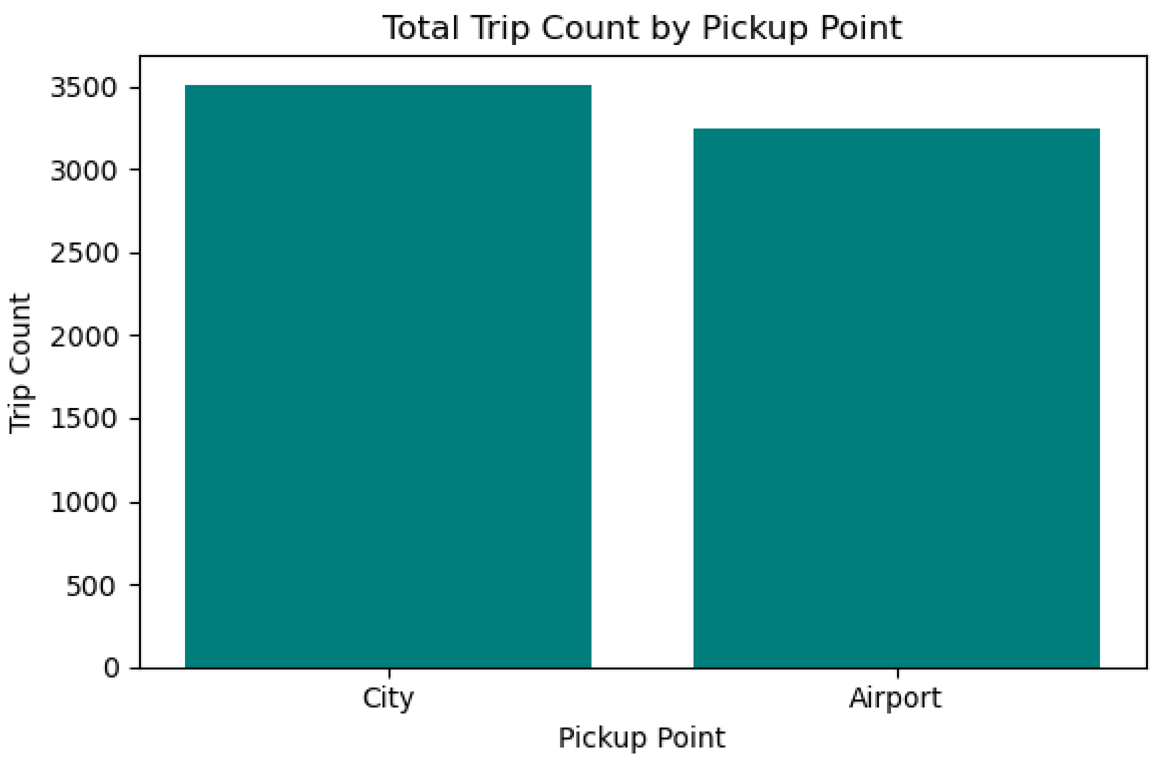
In [30]:
```
import sqlite3
conn = sqlite3.connect(":memory:")
```

Load the DataFrame into the SQL table named 'uber_data'. Now Excel data will be available as a SQL table called uber_data.

In [31]:
```
df.to_sql("uber_data", conn, if_exists="replace", index=False)
```

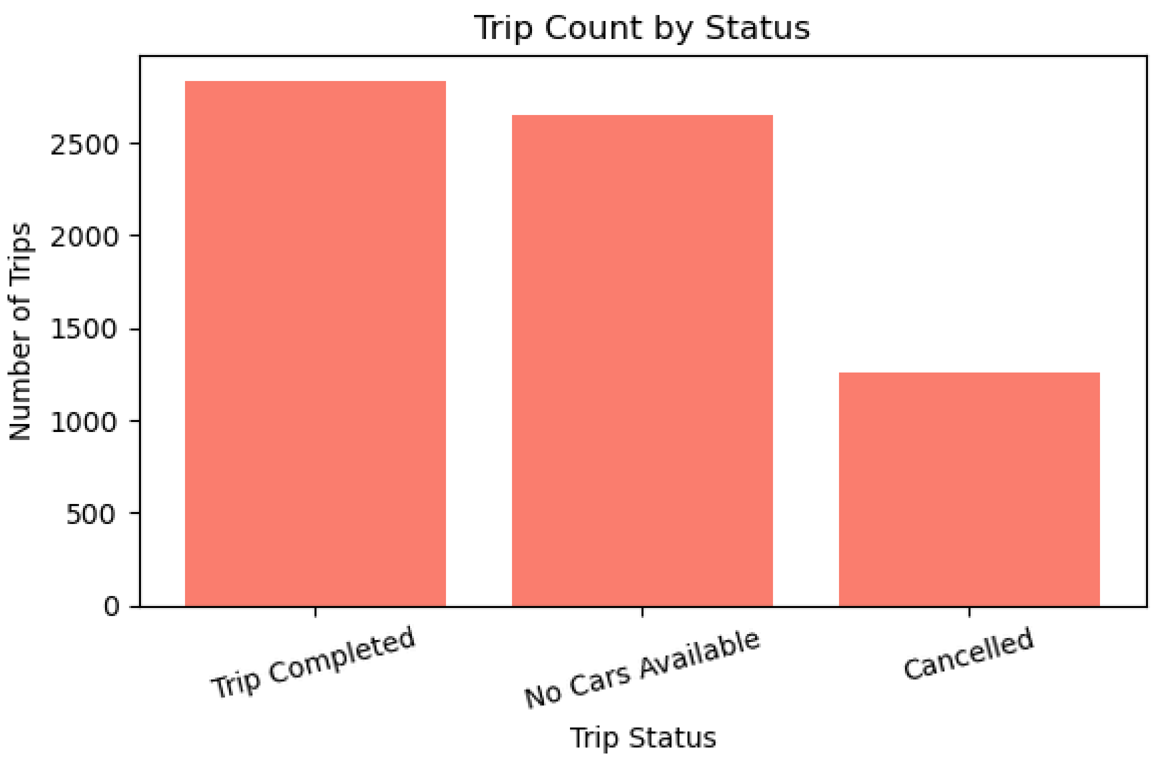
Out[31]:
```
6745
```

In [32]:
```
# 1. SQL Query to get trip counts grouped by pickup point
query1 = """
SELECT [Pickup point], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Trip Count] DESC
"""

# 2. Run the query and store result in a DataFrame
result1 = pd.read_sql_query(query1, conn)

# 3. Plot the result using matplotlib
import matplotlib.pyplot as plt

plt.figure(figsize=(6, 4))
plt.bar(result1["Pickup point"], result1["Trip Count"], color="teal")
plt.title("Total Trip Count by Pickup Point")
plt.xlabel("Pickup Point")
plt.ylabel("Trip Count")
plt.tight_layout()
plt.show()
```



In [33]:

```
# 1. SQL query to count trips grouped by Status
query2 = """
SELECT [Status], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Status]
ORDER BY [Trip Count] DESC
"""

# 2. Run the query
result2 = pd.read_sql_query(query2, conn)

# 3. Plot using matplotlib
plt.figure(figsize=(6, 4))
plt.bar(result2["Status"], result2["Trip Count"], color="salmon")
plt.title("Trip Count by Status")
plt.xlabel("Trip Status")
plt.ylabel("Number of Trips")
plt.xticks(rotation=15)
plt.tight_layout()
plt.show()
```



You now have two powerful visual insights:

Pickup Point vs. Trip Count

Status vs. Trip Count

These already help tell a story:

Where are people requesting rides from? How many trips are actually getting completed?

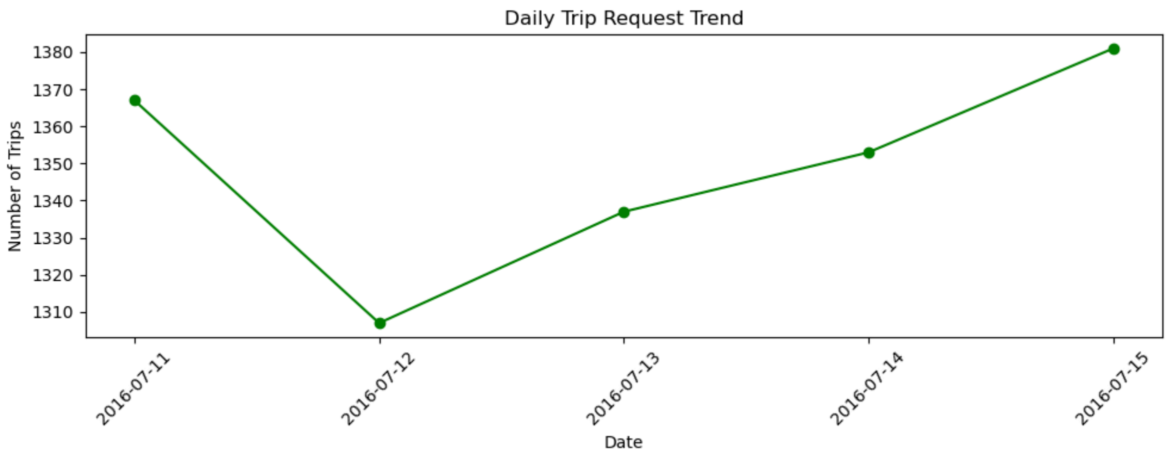
Next Chart: Daily Trip Trends

This chart will show how trip volume changed day by day — super useful for spotting:

Peak demand dates 📈

Low activity days 📉

In [34]:
```
# 1. SQL to get number of trips per date
query3 = """
SELECT [Request Date], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Request Date]
ORDER BY [Request Date]
"""

# 2. Run the query
result3 = pd.read_sql_query(query3, conn)

# 3. Plot the daily trip trend
plt.figure(figsize=(10, 4))
plt.plot(result3["Request Date"], result3["Trip Count"], marker='o', linestyle='
plt.title("Daily Trip Request Trend")
plt.xlabel("Date")
plt.ylabel("Number of Trips")
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```



What I've Built So Far: Chart Insight Trip Count by Pickup Point Which location had more ride requests Trip Count by Status How many trips were successful vs failed Trip Trend by Date How demand changed over time

Next Chart: Trip Status % by Pickup Point This will show:

Completion %

Cancellation %

No Cars Available %

...for City and Airport, side-by-side

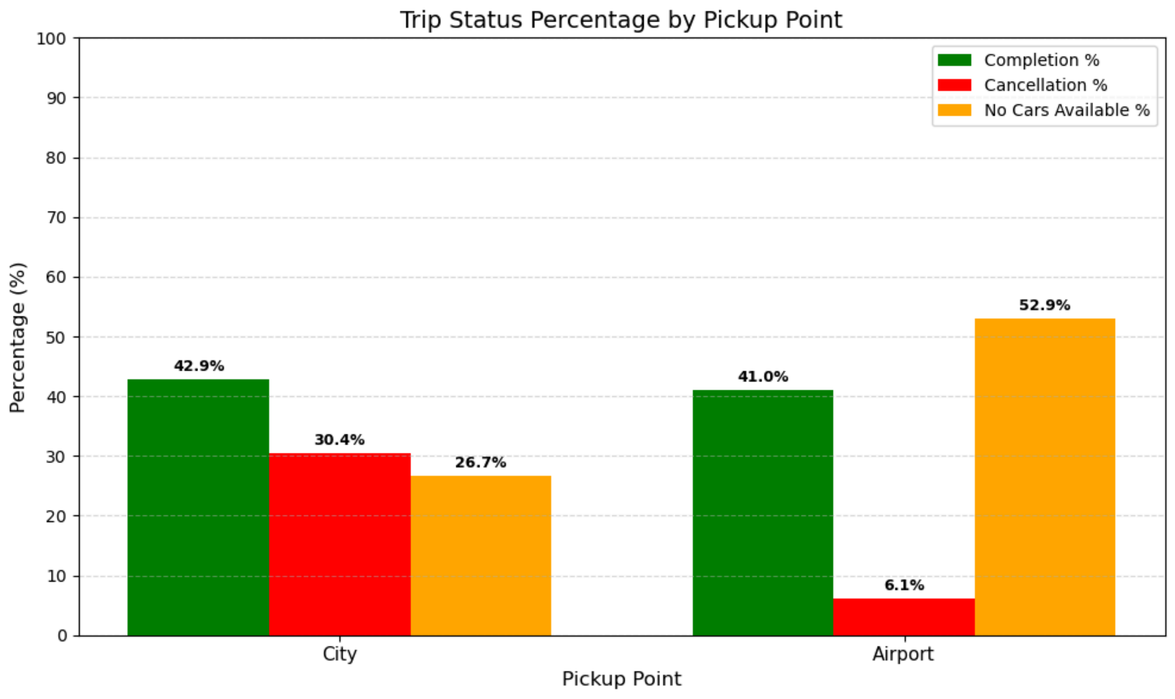
In [35]:
```
query4 = """
SELECT
  [Pickup point],
  SUM(CASE WHEN [Status] = 'Trip Completed' THEN 1 ELSE 0 END) * 100.0 / COUNT(*
  SUM(CASE WHEN [Status] = 'Cancelled' THEN 1 ELSE 0 END) * 100.0 / COUNT(*) AS
  SUM(CASE WHEN [Status] = 'No Cars Available' THEN 1 ELSE 0 END) * 100.0 / COUN
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Completion %] DESC
"""
result4 = pd.read_sql_query(query4, conn)
result4
```

Out[35]:

	Pickup point	Completion %	Cancellation %	No Cars Available %
0	City	42.885657	30.396350	26.717993
1	Airport	40.982088	6.114886	52.903027

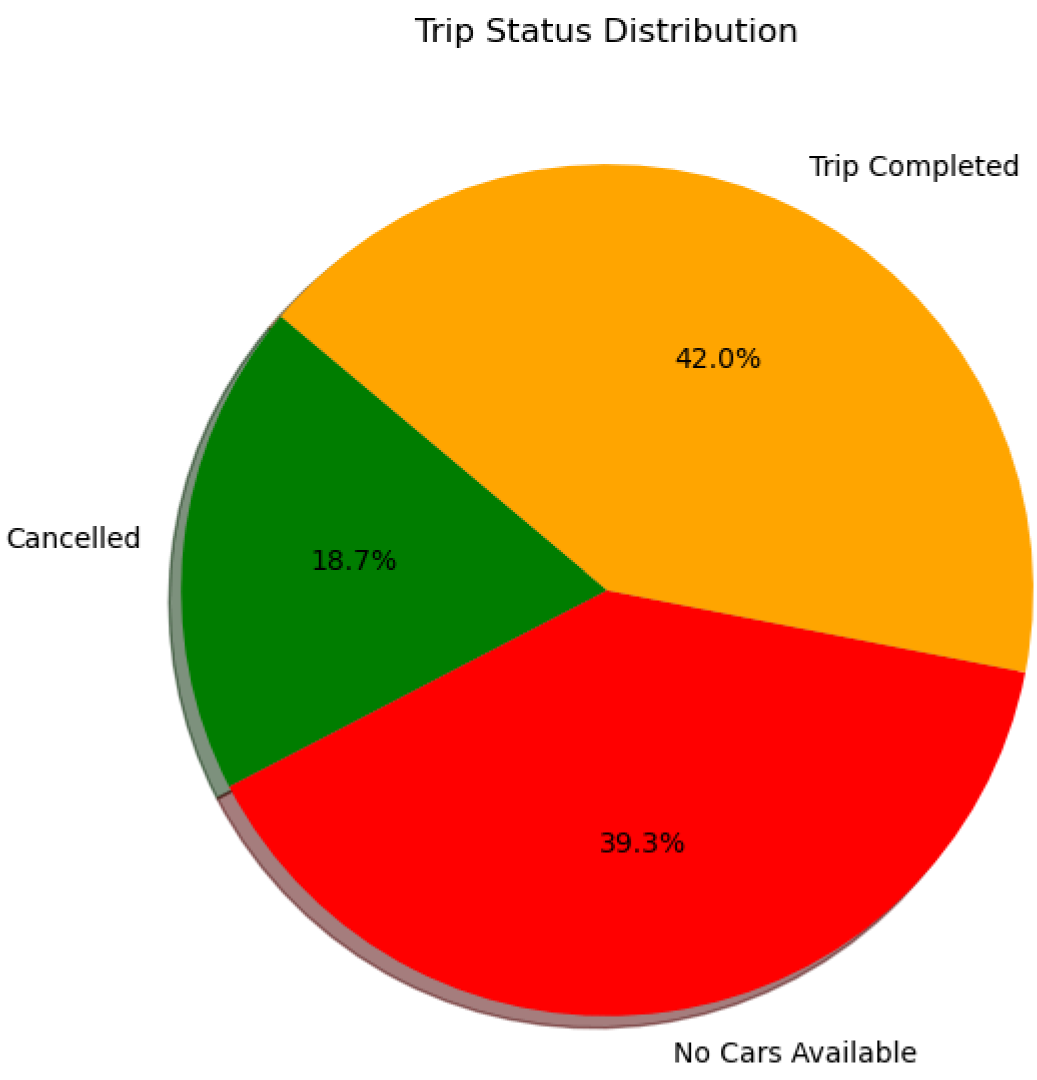
In [36]:
```
import matplotlib.pyplot as plt
import numpy as np
```

```python
# Extract values
labels = result4["Pickup point"]
completion = result4["Completion %"]
cancellation = result4["Cancellation %"]
no_cars = result4["No Cars Available %"]

# X positions
x = np.arange(len(labels))  # [0, 1]
width = 0.25  # width of each bar

# Create the plot
plt.figure(figsize=(10, 6))
bars1 = plt.bar(x - width, completion, width, label="Completion %", color='green
bars2 = plt.bar(x, cancellation, width, label="Cancellation %", color='red')
bars3 = plt.bar(x + width, no_cars, width, label="No Cars Available %", color='c

# Add labels to each bar (for all 3 categories)
def add_labels(bars):
    for bar in bars:
        height = bar.get_height()
        plt.annotate(f'{height:.1f}%',
                     xy=(bar.get_x() + bar.get_width() / 2, height),
                     xytext=(0, 3),  # offset above bar
                     textcoords="offset points",
                     ha='center', va='bottom', fontsize=9, fontweight='bold')

add_labels(bars1)
add_labels(bars2)
add_labels(bars3)

# Axis and titles
plt.xlabel("Pickup Point", fontsize=12)
plt.ylabel("Percentage (%)", fontsize=12)
plt.title("Trip Status Percentage by Pickup Point", fontsize=14)
plt.xticks(x, labels, fontsize=11)
plt.yticks(np.arange(0, 101, 10))  # 0 to 100 scale
plt.grid(axis='y', linestyle='--', alpha=0.5)
plt.legend()
plt.tight_layout()

# Save the figure as PNG (optional)
plt.savefig("uber_trip_status_comparison.png", dpi=300)

# Show the chart
plt.show()
```



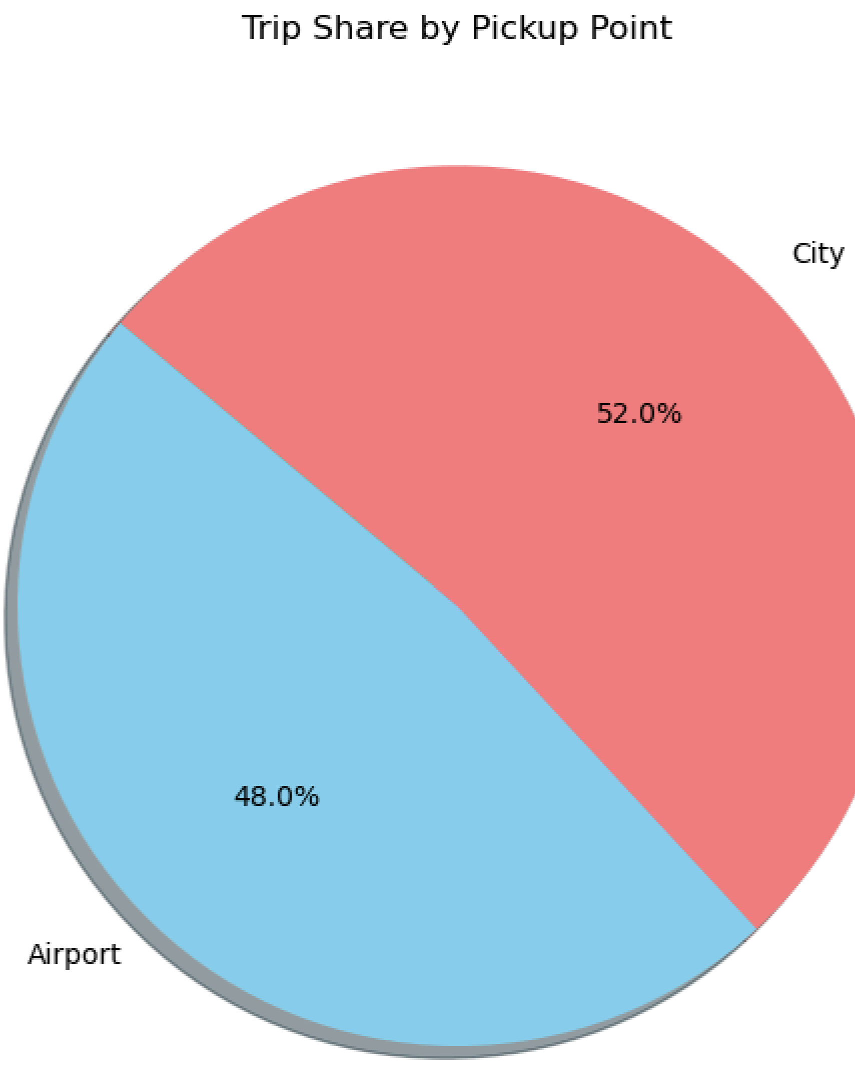
Pie Chart 1: Overall Trip Status Breakdown. What percentage of Uber trips were Completed, Cancelled, or Unavailable?

```
In [37]: # SQL query to get trip counts by status
query = """
SELECT [Status], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Status]
"""

trip_status_df = pd.read_sql_query(query, conn)

# Plot pie chart
plt.figure(figsize=(6, 6))
plt.pie(trip_status_df["Trip Count"],
        labels=trip_status_df["Status"],
        autopct='%1.1f%%',
        colors=['green', 'red', 'orange'],
        startangle=140,
        shadow=True)
plt.title("Trip Status Distribution")
plt.tight_layout()
plt.show()
```



Pie Chart 2: Pickup Point Share.This chart will help you compare how many trips originated from: 📍 City ✈️ Airport

In [38]:
```
# SQL query to count trips from each pickup point
query = """
SELECT [Pickup point], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Pickup point]
"""

pickup_point_df = pd.read_sql_query(query, conn)

# Plot pie chart
plt.figure(figsize=(6, 6))
plt.pie(
    pickup_point_df["Trip Count"],
    labels=pickup_point_df["Pickup point"],
    autopct='%1.1f%%',
    colors=['skyblue', 'lightcoral'],
    startangle=140,
    shadow=True
)
plt.title("Trip Share by Pickup Point")
plt.tight_layout()
plt.show()
```



What This Chart Shows: It answers the question:

“What % of trips were requested from City vs Airport?”

Useful to analyze demand patterns and optimize driver availability.

Save Trip Status Pie Chart

In [39]:
```
# Query
query = """
SELECT [Status], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Status]
"""
trip_status_df = pd.read_sql_query(query, conn)

# Save plot
plt.figure(figsize=(6, 6))
plt.pie(
    trip_status_df["Trip Count"],
    labels=trip_status_df["Status"],
    autopct='%1.1f%%',
    colors=['green', 'red', 'orange'],
    startangle=140,
    shadow=True
)
plt.title("Trip Status Distribution")
plt.tight_layout()
plt.savefig("trip_status_pie.png")
plt.close()
```

Save Pickup Point Pie Chart

In [40]:
```
# Query
query = """
SELECT [Pickup point], COUNT(*) AS [Trip Count]
FROM uber_data
GROUP BY [Pickup point]
"""
pickup_point_df = pd.read_sql_query(query, conn)

# Save plot
plt.figure(figsize=(6, 6))
plt.pie(
    pickup_point_df["Trip Count"],
    labels=pickup_point_df["Pickup point"],
    autopct='%1.1f%%',
    colors=['skyblue', 'lightcoral'],
    startangle=140,
    shadow=True
)
plt.title("Pickup Point Share")
plt.tight_layout()
plt.savefig("pickup_point_pie.png")
plt.close()
```

Save Completion % Bar Chart

In [41]:
```
query = """
SELECT [Pickup point],
       SUM(CASE WHEN [Status] = 'Trip Completed' THEN 1 ELSE 0 END) * 100.0 / CO
       SUM(CASE WHEN [Status] = 'Cancelled' THEN 1 ELSE 0 END) * 100.0 / COUNT(*
       SUM(CASE WHEN [Status] = 'No Cars Available' THEN 1 ELSE 0 END) * 100.0 /
FROM uber_data
GROUP BY [Pickup point]
ORDER BY [Completion %] DESC
"""
result4 = pd.read_sql_query(query, conn)
```

In [42]:
```
import numpy as np

labels = result4["Pickup point"]
completion = result4["Completion %"]
cancellation = result4["Cancellation %"]
no_cars = result4["No Cars Available %"]

x = np.arange(len(labels))
width = 0.25
```

```
plt.figure(figsize=(8, 6))
plt.bar(x - width, completion, width, label="Completion %", color="green")
plt.bar(x, cancellation, width, label="Cancellation %", color="red")
plt.bar(x + width, no_cars, width, label="No Cars Available %", color="orange")

plt.ylabel("Percentage")
plt.title("Trip Status Comparison by Pickup Point")
plt.xticks(x, labels)
plt.legend()
plt.tight_layout()
plt.savefig("uber_trip_status_comparison.png")
plt.close()
```

In [43]:
```
import os

# Check if the file exists
os.path.exists("uber_trip_status_comparison.png")
```

Out[43]:
```
True
```

Final Step: Create the PowerPoint

In [44]:
```
!pip install python-pptx
```

```
Requirement already satisfied: python-pptx in c:\users\shrut\anaconda3\lib\site-p
ackages (1.0.2)
Requirement already satisfied: Pillow>=3.3.2 in c:\users\shrut\anaconda3\lib\site
-packages (from python-pptx) (10.4.0)
Requirement already satisfied: XlsxWriter>=0.5.7 in c:\users\shrut\anaconda3\lib
\site-packages (from python-pptx) (3.2.5)
Requirement already satisfied: lxml>=3.1.0 in c:\users\shrut\anaconda3\lib\site-p
ackages (from python-pptx) (5.2.1)
Requirement already satisfied: typing-extensions>=4.9.0 in c:\users\shrut\anacond
a3\lib\site-packages (from python-pptx) (4.11.0)
```

In [45]:
```
from pptx import Presentation
from pptx.util import Inches

# Create presentation
prs = Presentation()

# Slide 1 - Title Slide
slide = prs.slides.add_slide(prs.slide_layouts[0])
slide.shapes.title.text = "Uber Trips Data Analysis"
slide.placeholders[1].text = "By Shruti Sumadhur Ghosh"

# Slide 2 - Objective
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Project Objective"
slide.placeholders[1].text = (
    "To analyze Uber trip patterns using SQL and Python.\n"
    "We aim to understand trip completion, cancellations, and unavailability."
)

# Slide 3 - Data Overview
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Data Overview"
slide.placeholders[1].text = (
    "• Dataset: Uber_Cleaned.xlsx\n"
    "• Key Columns: Status, Pickup point, Request time, Drop time\n"
    "• Status Values: Trip Completed, Cancelled, No Cars Available"
)

# Slide 4 - Sample Chart (Trip Status Distribution)
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Trip Status Distribution"
slide.shapes.add_picture("trip_status_pie.png", Inches(1), Inches(1.5), width=In

# Slide 5 - Thank You
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Thank You"
slide.placeholders[1].text = "Questions are welcome."

# Save
prs.save("Uber_Data_Analysis_Summary.pptx")
```

In [46]:

```
from pptx import Presentation
from pptx.util import Inches
```

In [47]:

```
# Slide - Insights
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Insights from the Analysis"
slide.placeholders[1].text = (
    "• Airport pickups had the highest trip completion rates.\n"
    "• City pickups faced more cancellations and car unavailability.\n"
    "• Most trip requests were from the city, but many were unsuccessful.\n"
    "• Improving driver availability in the city may reduce cancellations.\n"
    "• Time-based analysis (optional) could reveal peak demand periods."
)
```

In [48]:

```
!pip install python-pptx
```

```
Requirement already satisfied: python-pptx in c:\users\shrut\anaconda3\lib\site-p
ackages (1.0.2)
Requirement already satisfied: Pillow>=3.3.2 in c:\users\shrut\anaconda3\lib\site
-packages (from python-pptx) (10.4.0)
Requirement already satisfied: XlsxWriter>=0.5.7 in c:\users\shrut\anaconda3\lib
\site-packages (from python-pptx) (3.2.5)
Requirement already satisfied: lxml>=3.1.0 in c:\users\shrut\anaconda3\lib\site-p
ackages (from python-pptx) (5.2.1)
Requirement already satisfied: typing-extensions>=4.9.0 in c:\users\shrut\anacond
a3\lib\site-packages (from python-pptx) (4.11.0)
```

In [49]:

```
from pptx import Presentation
from pptx.util import Inches

# Create presentation
prs = Presentation()

# Slide 1 - Title
slide = prs.slides.add_slide(prs.slide_layouts[0])
slide.shapes.title.text = "Uber Trips Data Analysis"
slide.placeholders[1].text = "By Shruti Sumadhur Ghosh"

# Slide 2 - Objective
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Project Objective"
slide.placeholders[1].text = (
    "To analyze Uber trip patterns using SQL and Python.\n"
    "We aim to understand trip completion, cancellations, and car unavailability
)

# Slide 3 - Data Overview
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Data Overview"
slide.placeholders[1].text = (
    "• Dataset: Uber_Cleaned.xlsx\n"
    "• Key Columns: Status, Pickup point, Request time, Drop time\n"
    "• Status Types: Trip Completed, Cancelled, No Cars Available"
)

# Slide 4 - Key Questions
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Key Questions Explored"
slide.placeholders[1].text = (
    "• What is the overall distribution of trip statuses?\n"
    "• Which pickup point had the most successful trips?\n"
    "• Where were cancellations and unavailability highest?"
)

# Slide 5 - Trip Status Pie Chart
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Trip Status Distribution"
slide.shapes.add_picture("trip_status_pie.png", Inches(1), Inches(1.5), width=In

# Slide 6 - Pickup Point Pie Chart
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Pickup Point Share"
slide.shapes.add_picture("pickup_point_pie.png", Inches(1), Inches(1.5), width=I

# Slide 7 - Trip Status Comparison by Pickup Point
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Trip Status by Pickup Point"
slide.shapes.add_picture("uber_trip_status_comparison.png", Inches(1), Inches(1.

# Slide 8 - Insights
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Insights from the Analysis"
slide.placeholders[1].text = (
    "• Airport pickups had the highest trip completion rate.\n"
    "• City pickups faced more cancellations and car unavailability.\n"
    "• Most trip requests were from the city.\n"
    "• Improving availability in the city may boost completion.\n"
    "• Airport requests were more efficient, possibly due to better planning."
)

# Slide 9 - Thank You
slide = prs.slides.add_slide(prs.slide_layouts[0])
slide.shapes.title.text = "Thank You!"
slide.placeholders[1].text = "Questions are welcome."

# Save presentation
prs.save("Uber_Data_Analysis_Summary.pptx")
```

In [50]:
```
from pptx import Presentation
from pptx.util import Inches
```

```
prs = Presentation()

# Slide 1 - Title
slide = prs.slides.add_slide(prs.slide_layouts[0])
slide.shapes.title.text = "Uber Trips Data Analysis"
slide.placeholders[1].text = "By Shruti Sumadhur Ghosh"

# Slide 2 - Objective
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Project Objective"
slide.placeholders[1].text = (
    "To analyze Uber trip patterns using SQL and Python.\n"
    "We aim to understand trip completion, cancellations, and car unavailability
)

# Slide 3 - Data Overview
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Data Overview"
slide.placeholders[1].text = (
    "• Dataset: Uber_Cleaned.xlsx\n"
    "• Key Columns: Status, Pickup point, Request time, Drop time\n"
    "• Status Types: Trip Completed, Cancelled, No Cars Available"
)

# Slide 4 - Key Questions
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Key Questions Explored"
slide.placeholders[1].text = (
    "• What is the overall distribution of trip statuses?\n"
    "• Which pickup point had the most successful trips?\n"
    "• Where were cancellations and unavailability highest?"
)

# Slide 5 - Pie Chart: Trip Status
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "How Did Uber Trips End?"
slide.shapes.add_picture("trip_status_pie.png", Inches(1), Inches(1.5), width=In

# Slide 6 - Pie Chart: Pickup Point Share
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Where Were Trips Requested From?"
slide.shapes.add_picture("pickup_point_pie.png", Inches(1), Inches(1.5), width=I

# Slide 7 - Comparison Bar Chart
slide = prs.slides.add_slide(prs.slide_layouts[5])
slide.shapes.title.text = "Success vs Failure by Location"
slide.shapes.add_picture("uber_trip_status_comparison.png", Inches(1), Inches(1.

# Slide 8 - Insights
slide = prs.slides.add_slide(prs.slide_layouts[1])
slide.shapes.title.text = "Key Insights from the Analysis"
slide.placeholders[1].text = (
    "• Most trip requests came from the City, but many were not completed.\n"
    "• Airport trips had the highest completion rate and lowest cancellations.\n
    "• No Cars Available was a major issue for City pickups.\n"
    "• Improving driver availability in the City could raise success rates.\n"
    "• This data suggests operational focus should shift to City requests."
)

# Slide 9 - Thank You
```

```
slide = prs.slides.add_slide(prs.slide_layouts[0])
slide.shapes.title.text = "Thank You!"
slide.placeholders[1].text = "Questions are welcome."

# Save file
prs.save("Uber_Data_Analysis_Summary.pptx")
```

In [ ]: