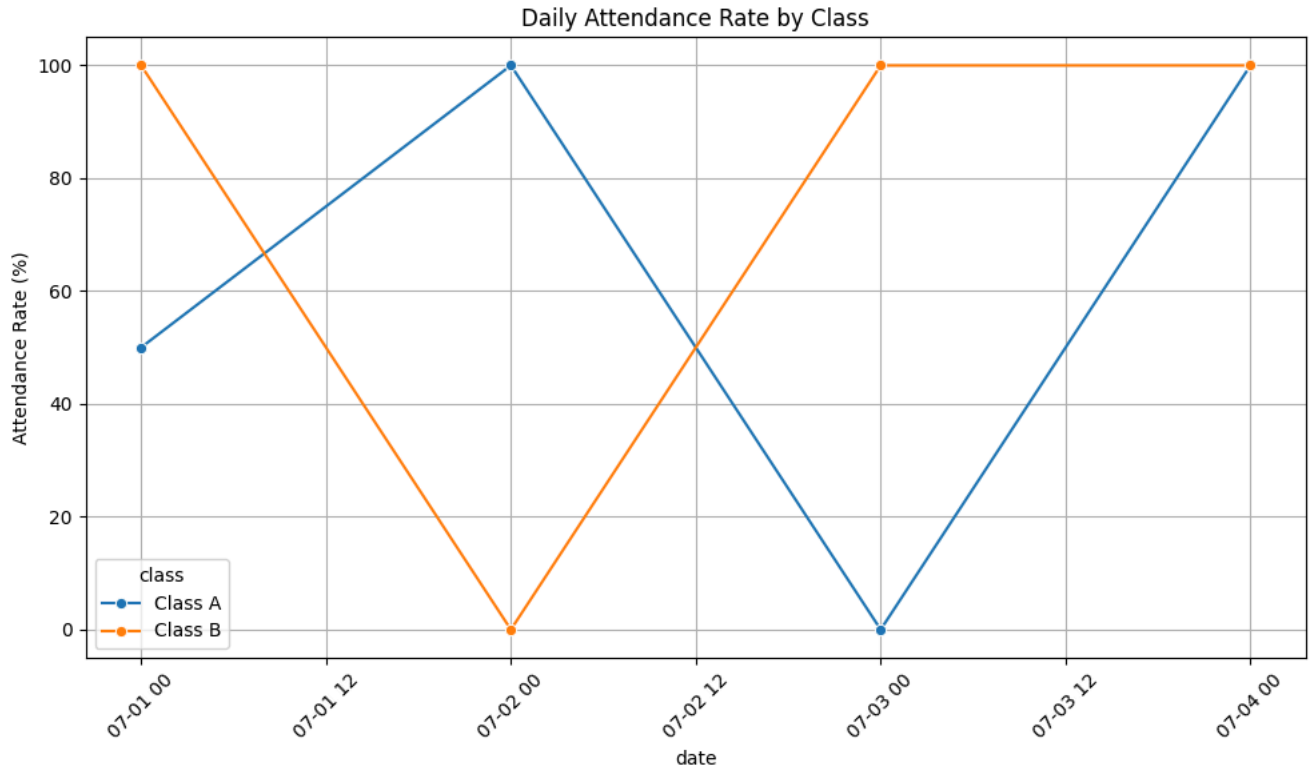
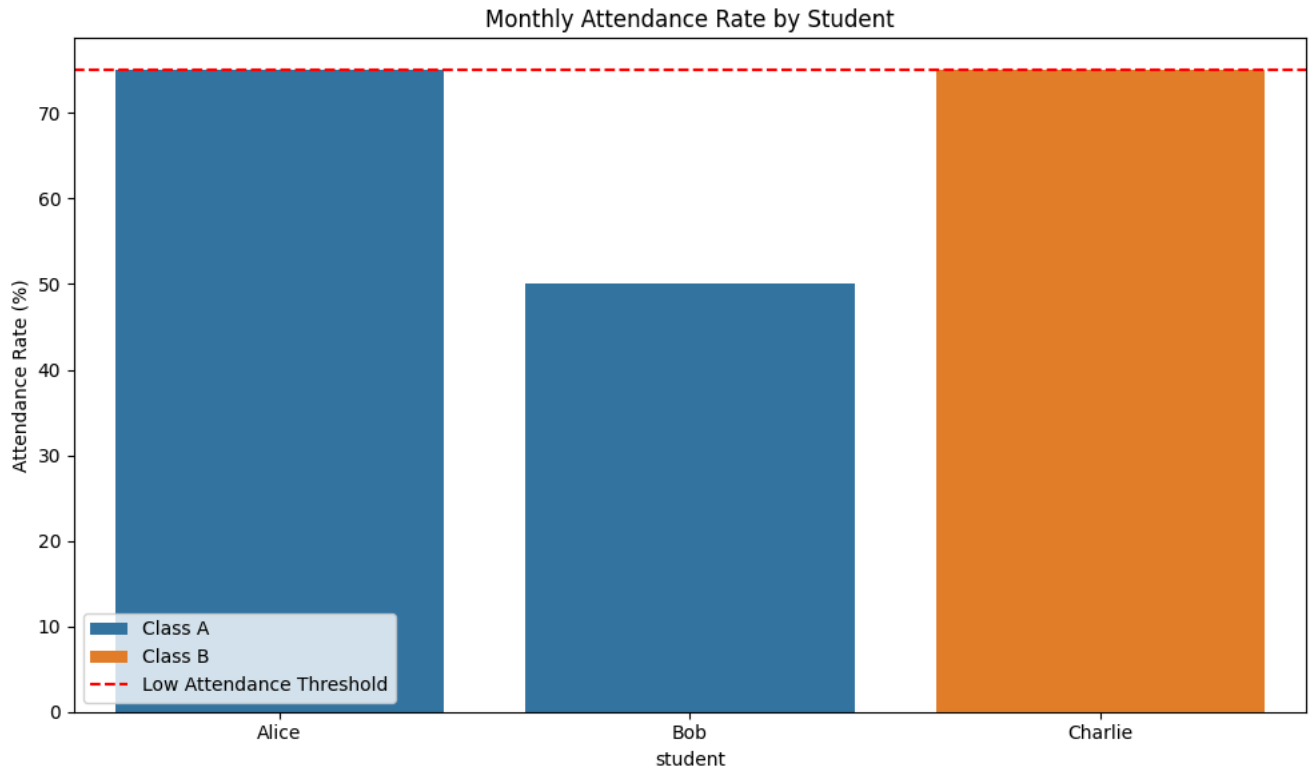
```
# ✅ Student Attendance Analyzer (Google Colab - One Cell Full Code)
import pandas as pd; import matplotlib.pyplot as plt; import seaborn as sns; from io import StringIO

# Sample CSV Data (replace with your own CSV upload later)
data = StringIO("""date,class,student,present
2025-07-01,Class A,Alice,True
2025-07-01,Class A,Bob,False
2025-07-01,Class B,Charlie,True
2025-07-02,Class A,Alice,True
2025-07-02,Class A,Bob,True
2025-07-02,Class B,Charlie,False
2025-07-03,Class A,Alice,False
2025-07-03,Class A,Bob,False
2025-07-03,Class B,Charlie,True
2025-07-04,Class A,Alice,True
2025-07-04,Class A,Bob,True
2025-07-04,Class B,Charlie,True
""")

# Load data
df = pd.read_csv(data, parse_dates=["date"])
df['present'] = df['present'].astype(bool)

# Daily Attendance Rate per Class
daily = df.groupby(['date', 'class']).agg(total=('student', 'count'), present=('present', 'sum')).reset_index()
daily['attendance_rate'] = round(100 * daily['present'] / daily['total'], 2)

# Monthly Attendance Rate per Student
df['month'] = df['date'].dt.to_period('M')
monthly = df.groupby(['month', 'class', 'student']).agg(present_days=('present', 'sum'), total_days=('present', 'count')).reset_index()
monthly['attendance_rate'] = round(100 * monthly['present_days'] / monthly['total_days'], 2)

# 🎨 Plot Daily Attendance
plt.figure(figsize=(10,6))
sns.lineplot(data=daily, x='date', y='attendance_rate', hue='class', marker='o')
plt.title("Daily Attendance Rate by Class")
plt.ylabel("Attendance Rate (%)")
plt.xticks(rotation=45)
plt.grid(True)
plt.tight_layout()
plt.show()

# 🎨 Plot Monthly Attendance by Student
plt.figure(figsize=(10,6))
sns.barplot(data=monthly, x='student', y='attendance_rate', hue='class')
plt.axhline(75, color='red', linestyle='--', label='Low Attendance Threshold')
plt.title("Monthly Attendance Rate by Student")
plt.ylabel("Attendance Rate (%)")
plt.legend()
plt.tight_layout()
plt.show()

# 🚨 List Students Below Threshold
low_attendance = monthly[monthly['attendance_rate'] < 75]
print("⚠️ Students with Attendance Below 75%:\n", low_attendance[['month','class','student','attendance_rate']])
```

What can I help you build?


Daily Attendance Rate by Class
Attendance Rate (%)
100
80
60
40
20
0
class
Class A
Class B
07-01 00
07-01 12
07-02 00
07-02 12
07-03 00
07-03 12
07-04 00
date


Monthly Attendance Rate by Student
Attendance Rate (%)
70
60
50
40
30
20
10
0
Class A
Class B
Low Attendance Threshold
Alice
Bob
Charlie
student