```
import requests
import matplotlib.pyplot as plt
from datetime import datetime
# Your desired city
CITY = "Madurai"
API_KEY = "cc871a05a16f13537fa73a7749b27edf"
URL
f"http://api.openweathermap.org/data/2.5/forecast?q={CITY}&appid={API_KEY}&units=metri
try:
    response = requests.get(URL)
    response.raise_for_status() # Raise exception for HTTP errors
    data = response.json()
except requests.exceptions.RequestException as e:
    print(f" Network error: {e}")
    exit()
if "list" in data:
    dates = []
    temps = []
    for item in data["list"][:10]: # Limit to first 10 time points
        # Convert date string to datetime for better x-axis formatting
        dt = datetime.strptime(item["dt_txt"], "%Y-%m-%d %H:%M:%S")
        dates.append(dt)
        temps.append(item["main"]["temp"])
    # Plot
    plt.figure(figsize=(10, 5))
    plt.plot(dates, temps, marker='o', color='purple')
    plt.title(f"5-Day Weather Forecast: {CITY}")
    plt.xlabel("Date & Time")
    plt.ylabel("Temperature (°C)")
    plt.xticks(rotation=45)
    plt.tight_layout()
    plt.grid(True)
    plt.show()
else:
    print(f"API Error: {data.get('message', 'Unknown error')}")
```



