Premier League data Plotted using APis

Using an api from football-data.org, with auth token: de27c6f949e040418ee4fcb5206ca657 I have plotted data from that api, getting tables and sorting them

```python
import requests
url = "https://api.football-data.org/v4/competitions/PL/matches"
headers = {"X-Auth-Token": "de27c6f949e040418ee4fcb5206ca657"}
response = requests.get(url, headers=headers)

if response.status_code == 200:
    data = response.json()
else:
    print(f"Error: {response.status_code}, {response.text}")
```

```python
import pandas as pd
df = pd.DataFrame(data['matches'])


df
```

Selecting the name of a team alone from the "homeTeam" data

```python
df['home_team_name'] = df['homeTeam'].apply(lambda x: x['name'] if isinstance(x, di
df['away_team_name'] = df['awayTeam'].apply(lambda x: x['name'] if isinstance(x, di

df['home_goals'] = df['score'].apply(lambda x: x['fullTime']['home'] if isinstance(
df['away_goals'] = df['score'].apply(lambda x: x['fullTime']['away'] if isinstance(


df['utcDate'] = pd.to_datetime(df['utcDate'])

# Format as 'Day, Month Date, Year - HH:MM AM/PM'
df['match_date'] = df['utcDate'].dt.strftime('%A, %B %d, %Y - %I:%M %p')
```

Plotting the matches in order of most recent

```python
df_pl = df[df['status'] == 'FINISHED'].copy()

df_pl= df_pl[['home_team_name','status', 'away_team_name', 'home_goals', 'away_goal

df_pl['match_date'] = pd.to_datetime(df_pl['match_date'], format='%A, %B %d, %Y - %
df_pl = df_pl.sort_values(by='match_date', ascending=False)

df_pl.head(10)
```

To Get Standings

to get the top 10 on the Premier League table

```python
import requests
url = "https://api.football-data.org/v4/competitions/PL/standings"
headers = {"X-Auth-Token": "de27c6f949e040418ee4fcb5206ca657"}
response = requests.get(url, headers=headers)

if response.status_code == 200:
    data = response.json()
else:
    print(f"Error: {response.status_code}, {response.text}")
# Extract standings data
standings = data['standings'][0]['table']  # The first element contains league tabl

# Convert to DataFrame
df = pd.DataFrame(standings)
```

```python
df['team_name'] = df['team'].apply(lambda x: x['name'] if isinstance(x, dict) else

df_standings= df[['position','team_name','playedGames','won','draw','lost','points'

df_standings.head(10)
```