

In [6]:

```
# Import necessary libraries

# Create a fictional dataset for cricket play

# Convert to DataFrame

# Set the plot style

# Create the chart gallery

# Line Chart: Total runs over players

# Bar Chart: Batting average of players

# Pie Chart: Distribution of centuries scored by players

# Scatter Plot: Total runs vs. Batting average

# Box Plot: Batting average distribution

# Radar Chart: Player comparison on multiple aspects (Total Runs, Batting Average, Strik

# Show radar chart for Virat Kohli

# Adjust layout and show plot

import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
import pandas as pd

data = {
    'Player': ['Virat Kohli', 'Rohit Sharma', 'Steve Smith', 'KL Rahul', 'Joe Root'],
    'Total Runs': [13906, 10866, 5627, 2851, 6522],
    'Batting Average': [53.41, 48.96, 60.89, 45.28, 51.25],
    'Centuries': [43, 29, 27, 18, 20],
    'Wickets': [9, 12, 72, 0, 103],
    'Strike Rate': [89.5, 94.5, 83.2, 74.3, 82.0]
}

df = pd.DataFrame(data)

sns.set(style="whitegrid")

fig, axs = plt.subplots(3, 2, figsize=(12, 12))

axs[0, 0].plot(df['Player'], df['Total Runs'], marker='o', color='b')
axs[0, 0].set_title('Line Chart: Total Runs Comparison')
axs[0, 0].set_xlabel('Player')
axs[0, 0].set_ylabel('Total Runs')
```

```

axs[0, 1].bar(df['Player'], df['Batting Average'], color='g')
axs[0, 1].set_title('Bar Chart: Batting Average')
axs[0, 1].set_xlabel('Player')
axs[0, 1].set_ylabel('Batting Average')

century_distribution = df['Centuries']
axs[1, 0].pie(century_distribution, labels=df['Player'], autopct='%1.1f%%', startangle=90)
axs[1, 0].set_title('Pie Chart: Century Distribution')

axs[1, 1].scatter(df['Total Runs'], df['Batting Average'], color='r')
axs[1, 1].set_title('Scatter Plot: Total Runs vs. Batting Average')
axs[1, 1].set_xlabel('Total Runs')
axs[1, 1].set_ylabel('Batting Average')

axs[2, 0].boxplot(df['Batting Average'], vert=False, patch_artist=True, boxprops=dict(facecolor='lightblue'))
axs[2, 0].set_title('Box Plot: Batting Average Distribution')
axs[2, 0].set_xlabel('Batting Average')

def radar_chart(df, player):
    labels = ['Total Runs', 'Batting Average', 'Strike Rate', 'Centuries']

    stats = df.loc[df['Player'] == player, ['Total Runs', 'Batting Average', 'Strike Rate', 'Centuries']]

    stats = np.concatenate((stats, [stats[0]]))

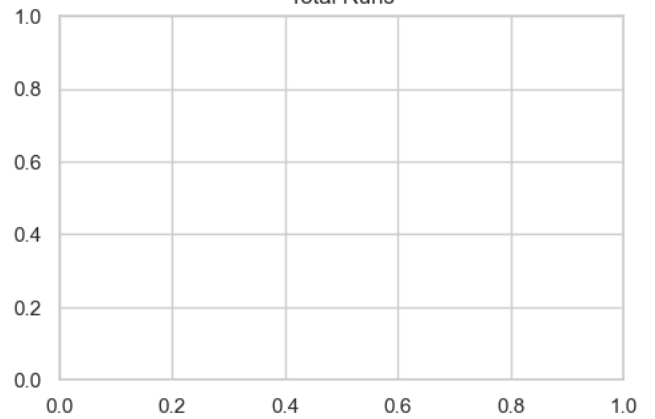
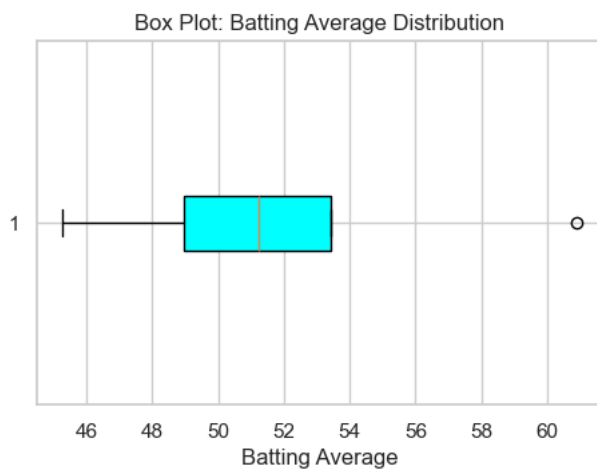
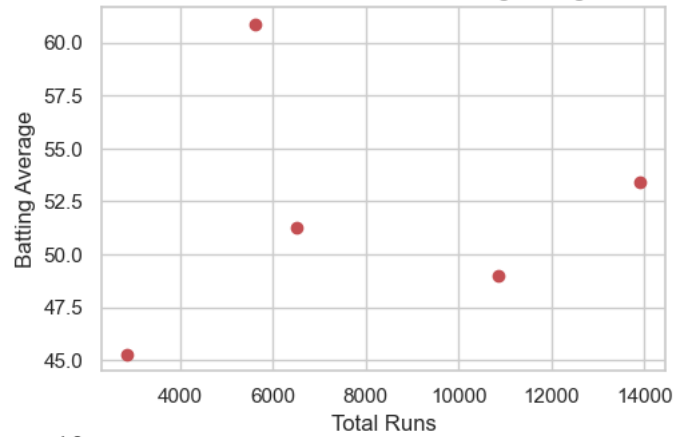
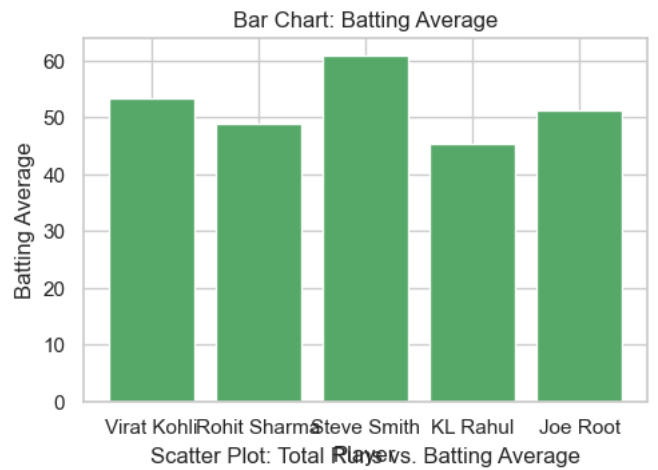
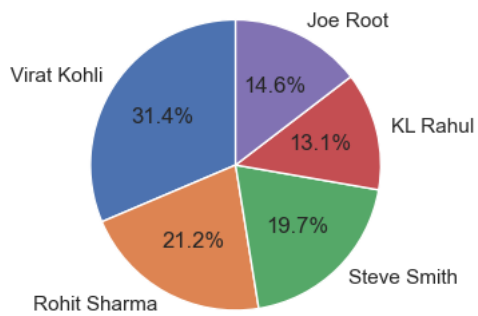
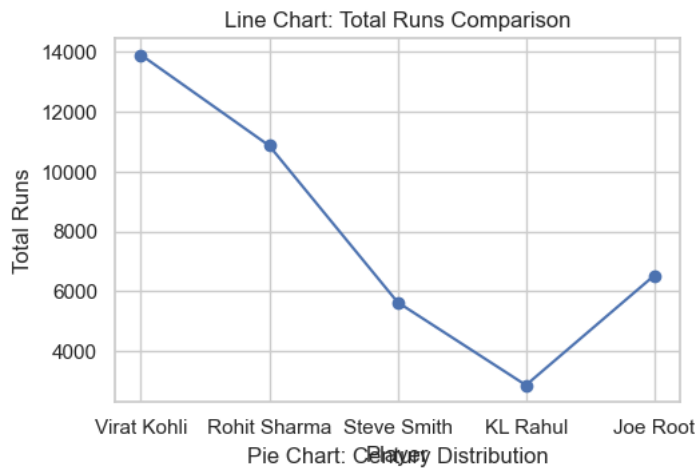
    angles = np.linspace(0, 2 * np.pi, len(labels), endpoint=False).tolist()
    angles += angles[:1]

    fig, ax = plt.subplots(figsize=(6, 6), subplot_kw=dict(polar=True))
    ax.fill(angles, stats, color='purple', alpha=0.25)
    ax.plot(angles, stats, color='purple', linewidth=2)
    ax.set_yticklabels([])
    ax.set_xticks(angles[:-1])
    ax.set_xticklabels(labels)
    ax.set_title(f'Radar Chart: {player} Comparison')

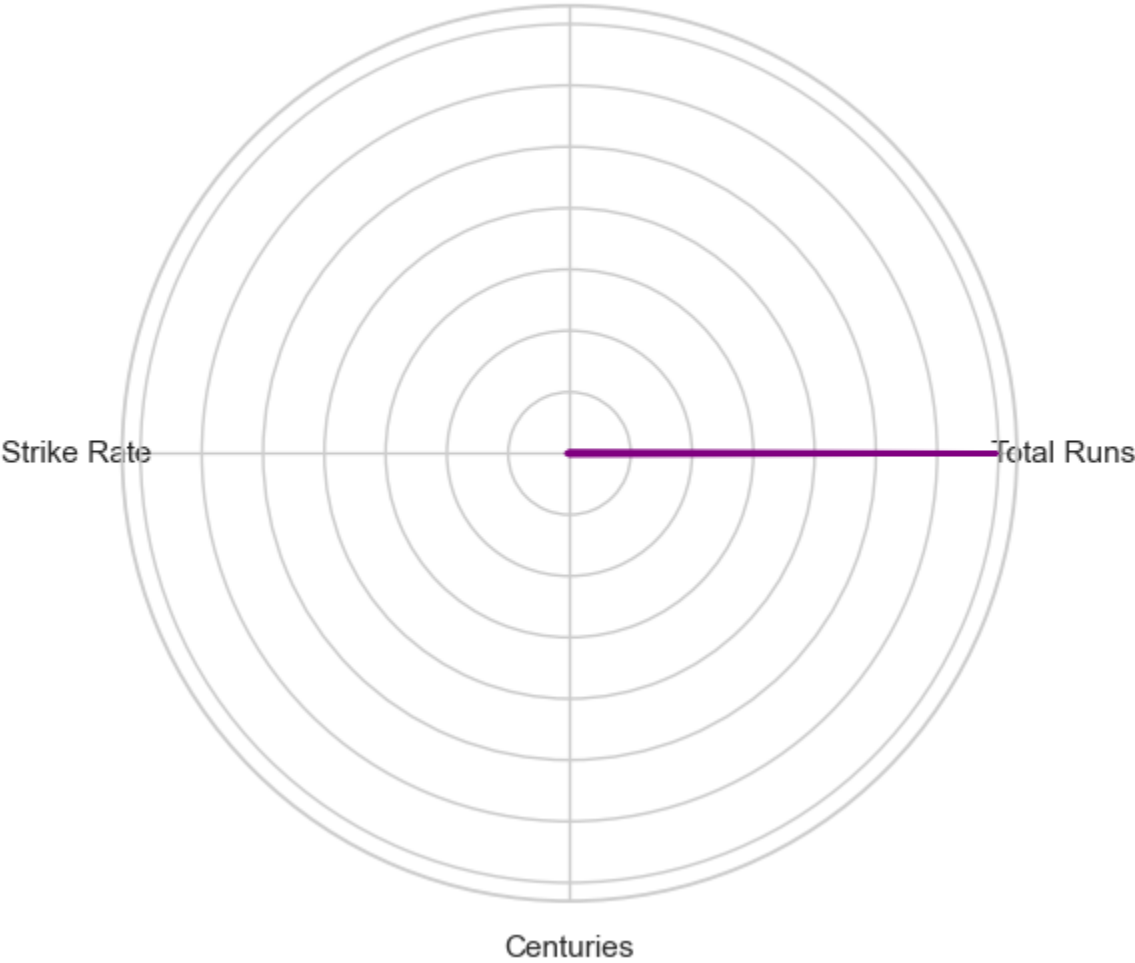
radar_chart(df, 'Virat Kohli')

plt.tight_layout()
plt.show()

```



Radar Chart: Virat Kohli Comparison
Batting Average



In []:

