0.0.1 Question 4b

Create two line plots below. The first should show how the **average movie runtime** has changed over time; the second should show how the **average movie rating** has changed over time. The x-axis should be `startYear` for both plots. Use the columns from the table generated in the previous part, `res_q4a`.

Notes: * Please use `sns` or `plt` functions for plotting. * Please include descriptive titles and labels. * If your plot does not show up in the generated PDF, please upload a PDF with a screenshot of your code and the plot.

```python
In [31]: plt.figure(figsize=(12, 5))

         # First subplot: Average Runtime
         plt.subplot(1, 2, 1)   # DO NOT MODIFY THIS LINE
         plt.plot(res_q4a['startYear'], res_q4a['avgRuntime'], marker='o')
         plt.title('Average Movie Runtime Over Years')
         plt.xlabel('Release Year')
         plt.ylabel('Average Runtime (minutes)')
         plt.grid(True)

         # Second subplot: Average Rating
         plt.subplot(1, 2, 2)   # DO NOT MODIFY THIS LINE
         plt.plot(res_q4a['startYear'], res_q4a['avgRating'], marker='o', color='green')
         plt.title('Average Movie Rating Over Years')
         plt.xlabel('Release Year')
         plt.ylabel('Average IMDb Rating')
         plt.grid(True)

         plt.tight_layout()
```
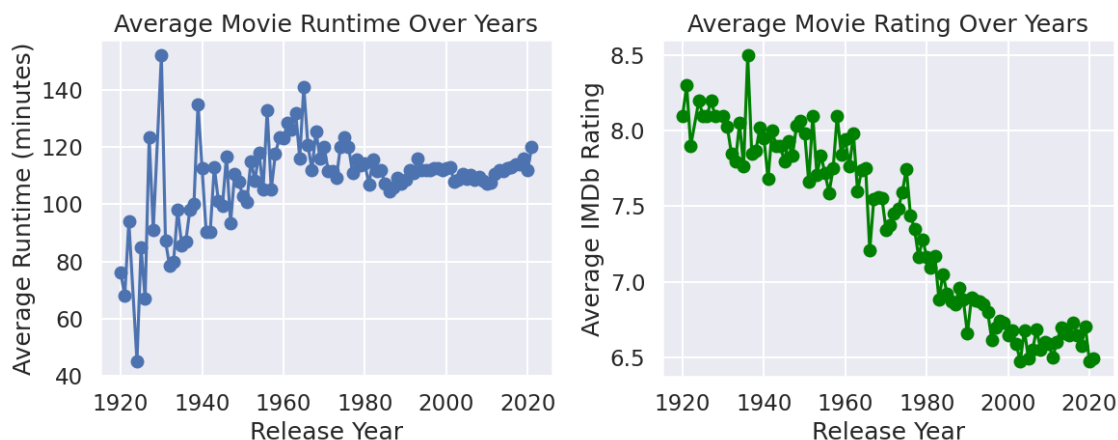
Write 1–2 sentences describing any trends you observe in each plot. This will be graded for completion. For Average Movie Runtime Over Years:

Over time, movies have gradually gotten longer. In the early 1900s, the average movie was around 70 to

For Average Movie Rating Over Years:

The average movie rating has been slowly dropping since around the 1950s. Movies used to average above