

```
In [9]: import pandas as pd
data = pd.read_csv('c.csv')
data
```

Out[9]:

	Rating	Comment
0	5.0	Good
1	4.0	Awesome
2	3.0	Good
3	NaN	NaN
4	5.0	Tasty
5	4.0	Amazing
6	NaN	NaN
7	3.0	Best coffee
8	2.0	Need to improve
9	4.0	Superb

```
In [10]: print(data.info())

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 2 columns):
 #   Column  Non-Null Count  Dtype
---  -
 0   Rating    8 non-null      float64
 1   Comment   8 non-null      object
dtypes: float64(1), object(1)
memory usage: 292.0+ bytes
None
```

```
In [11]: print(data.isnull().sum())

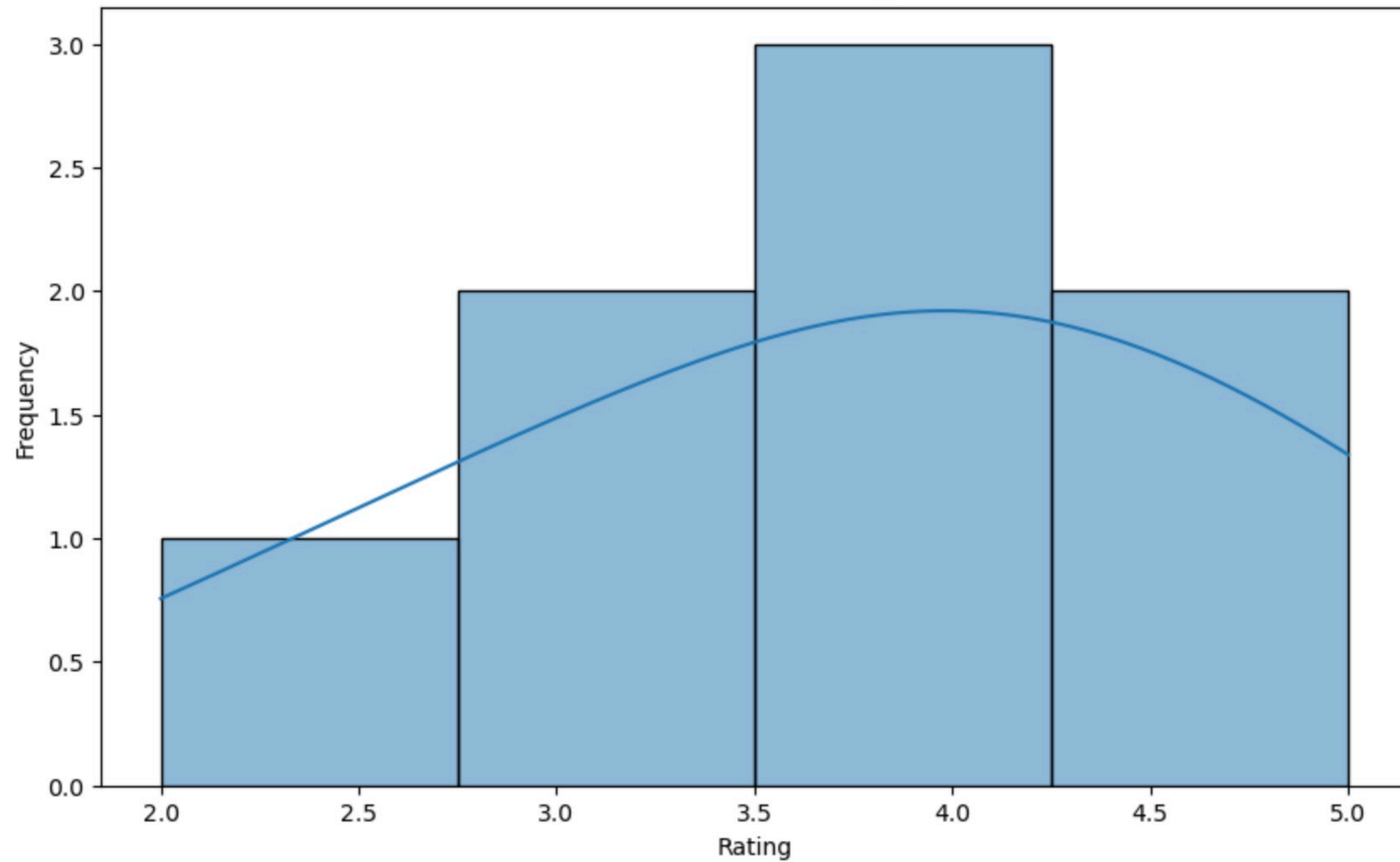
Rating      2
Comment     2
dtype: int64
```

```
In [12]: print(data.isnull().sum())
data = data.dropna()
```

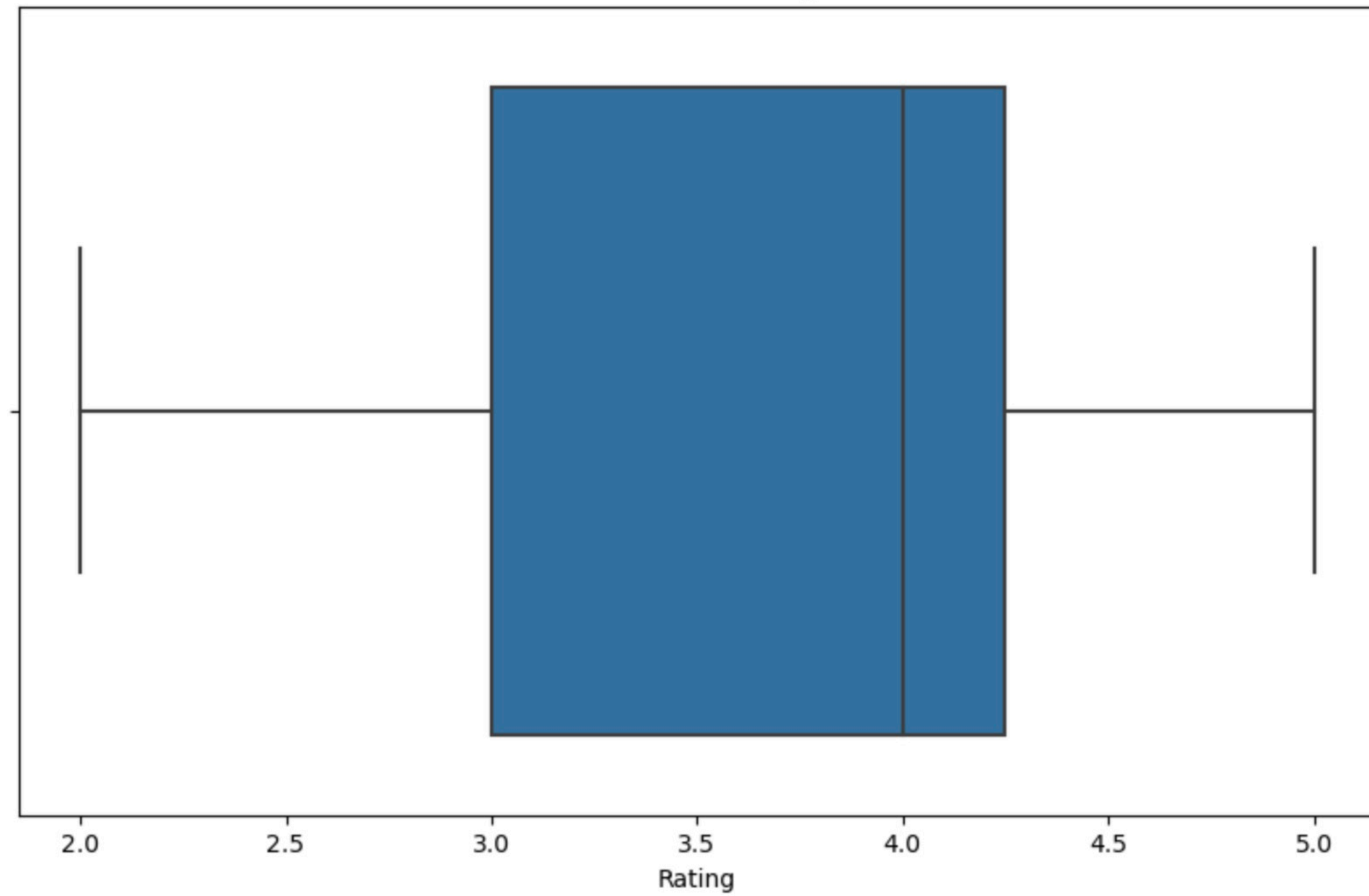
```
Rating      2
Comment      2
dtype: int64
```

```
In [17]: import seaborn as sns
import matplotlib.pyplot as plt
plt.figure(figsize=(10, 6))
sns.histplot(data['Rating'], kde=True)
plt.title('Distribution of Ratings')
plt.xlabel('Rating')
plt.ylabel('Frequency')
plt.show()
plt.figure(figsize=(10, 6))
sns.boxplot(x=data['Rating'])
plt.title('Box Plot of Ratings')
plt.xlabel('Rating')
plt.show()
data['comment_length'] = data['Comment'].apply(len)
plt.figure(figsize=(10, 6))
sns.histplot(data['comment_length'], kde=True)
plt.title('Distribution of Comment Lengths')
plt.xlabel('Comment Length')
plt.ylabel('Frequency')
plt.show()
plt.figure(figsize=(10, 6))
sns.boxplot(x=data['comment_length'])
plt.title('Box Plot of Comment Lengths')
plt.xlabel('Comment Length')
plt.show()
```

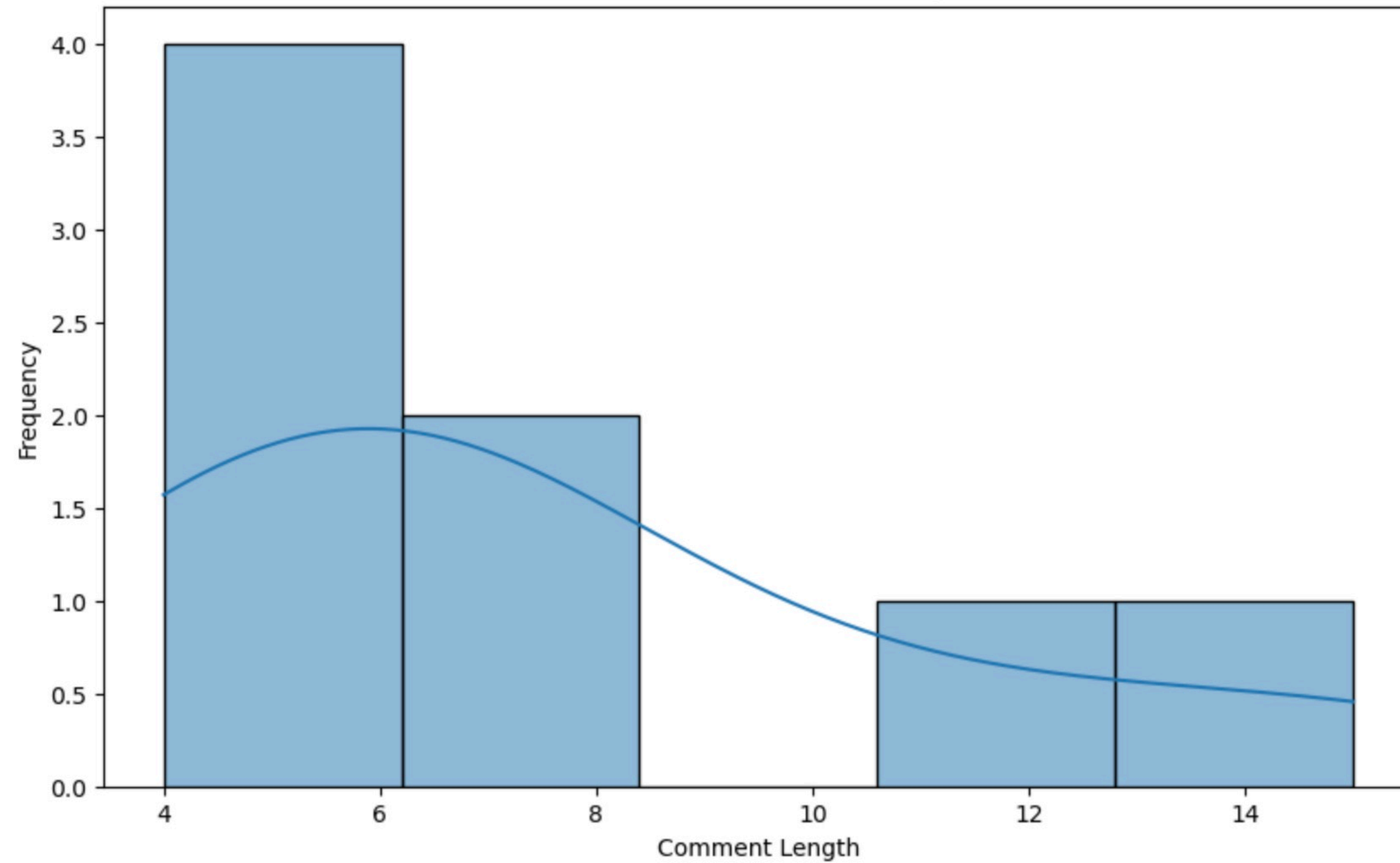
Distribution of Ratings



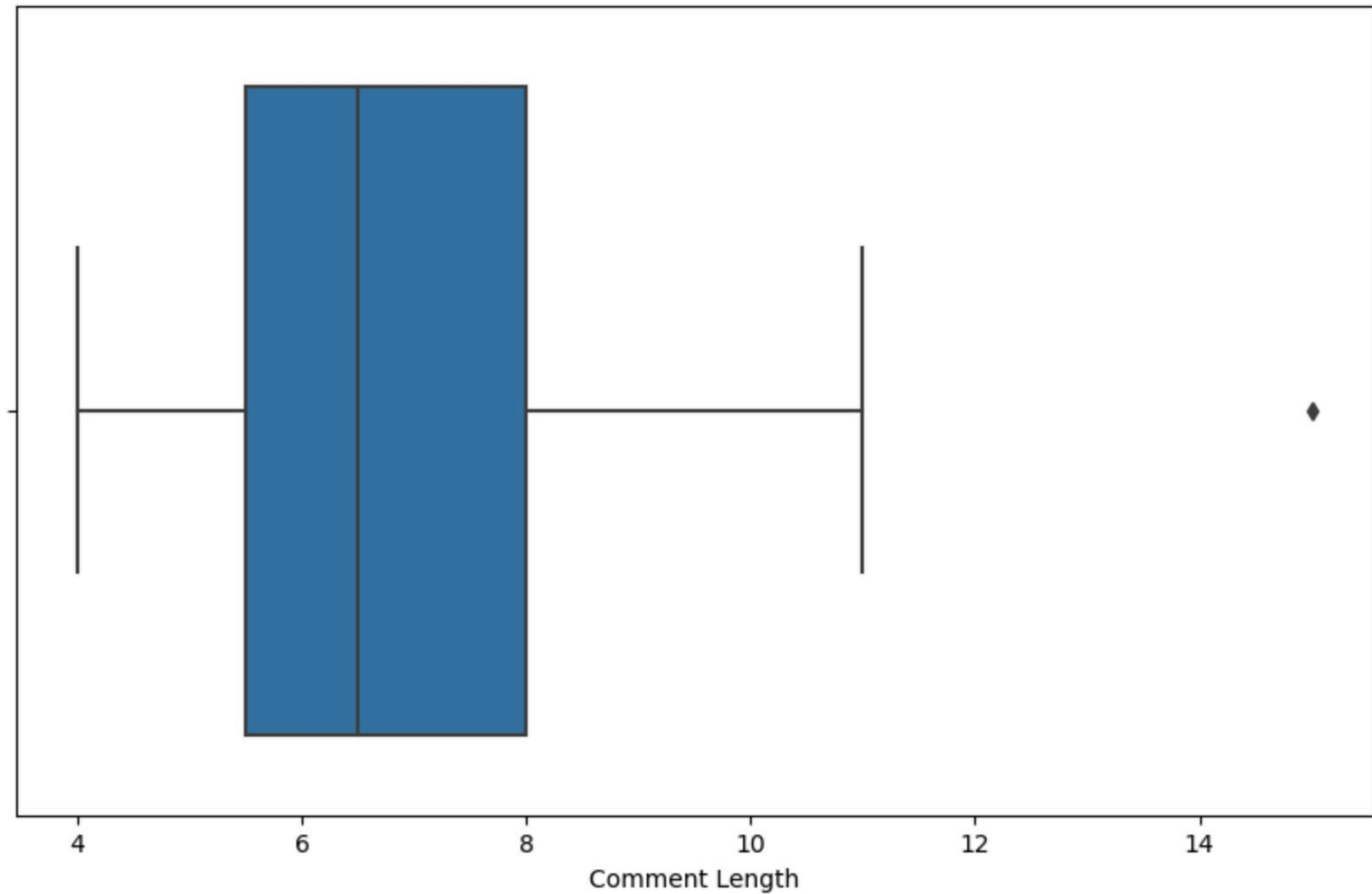
Box Plot of Ratings



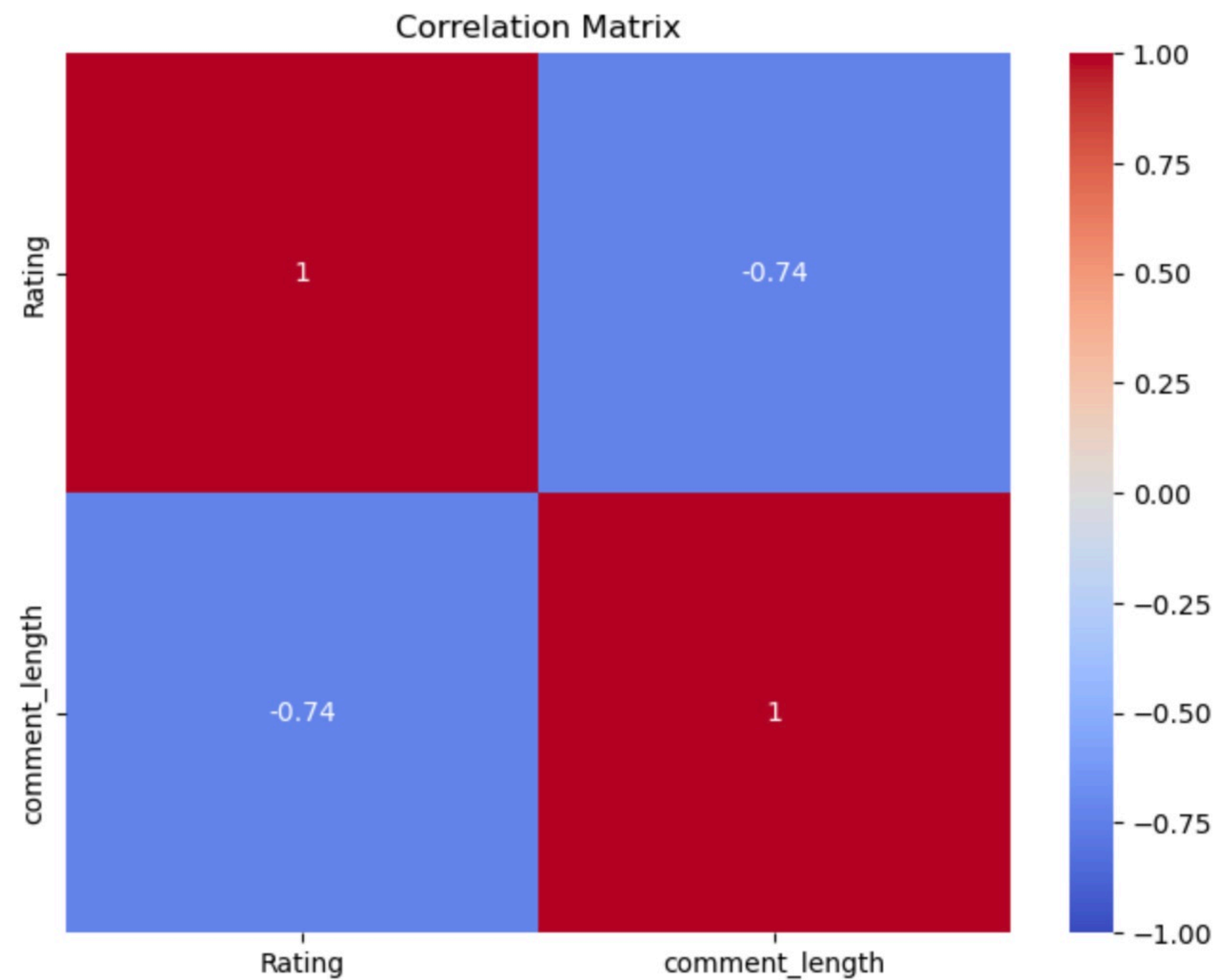
Distribution of Comment Lengths



Box Plot of Comment Lengths



```
In [18]: correlation_matrix = data[['Rating', 'comment_length']].corr()
plt.figure(figsize=(8, 6))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm', vmin=-1, vmax=1)
plt.title('Correlation Matrix')
plt.show()
```



```
In [19]: plt.figure(figsize=(10, 6))
sns.scatterplot(x='Rating', y='comment_length', data=data)
plt.title('Scatter Plot of Rating vs. Comment Length')
plt.xlabel('Rating')
plt.ylabel('Comment Length')
plt.show()
```

