```
print(df.head())
print(df.info())
print(df.describe())
print("\nMissing values:\n", df.isnull().sum())
# 1) Distribution of Case Outcomes
```

sns.countplot(x='Case\_Outcome', data=df) plt.title("Distribution of Case Outcomes")

plt.xlabel("Case Outcome") plt.ylabel("Count") plt.show() # 2) Attorney Experience vs Case Outcome

sns.boxplot(x='Case\_Outcome', y='Experience\_Years', data=df) plt.title("Attorney Experience vs Case Outcome") plt.xlabel("Case Outcome")

plt.ylabel("Years of Experience") plt.show() # 3) Average Win/Loss Ratio by Education Level sns.barplot(x='Education\_Level', y='Win\_Loss\_Ratio', data=df)

plt.title("Average Win/Loss Ratio by Education Level") plt.xlabel("Education Level") plt.ylabel("Avg. Win/Loss Ratio") plt.xticks(rotation=45) plt.show()

# 4) Weighted Score Distribution by Case Outcome sns.violinplot(x='Case\_Outcome', y='Weighted\_Score', data=df) plt.title("Weighted Score Distribution by Case Outcome") plt.xlabel("Case Outcome") plt.ylabel("Weighted Score") plt.show()

# 5) Correlation Matrix of Numeric Features corr = df.corr(numeric\_only=True) sns.heatmap(corr, annot=True, cmap='coolwarm') plt.title("Correlation Matrix of Numeric Features") plt.show() Experience\_Years Win\_Loss\_Ratio Education\_Level Weighted\_Score \

16 0.72 JD 0.62 0 0.49 None 0.23 11 0.59 LLM 0.44 13 0.37 JD 0.47 1 0.38 JD 0.27 0 1 2 3 4

Case\_Outcome 0 1 1 0 0 2 3 <class 'pandas.core.frame.DataFrame'> RangeIndex: 200 entries, 0 to 199 Data columns (total 5 columns): # Column Non-Null Count Dtype 0 Experience\_Years 200 non-null int64 Win\_Loss\_Ratio 200 non-null float64 Education\_Level 200 non-null object Weighted\_Score 200 non-null float64 Case\_Outcome int64 200 non-null dtypes: float64(2), int64(2), object(1) memory usage: 7.9+ KB

30.000000

0

Experience\_Years Win\_Loss\_Ratio Weighted\_Score Case\_Outcome 200.000000 200.000000 200.00000 200.000000 count 14.905000 0.545000 0.52900 0.355000 mean 0.479714 std 9.665042 0.203154 0.17566 0.000000 min 0.200000 0.15000 0.000000 0.38000 25% 6.000000 0.377500 0.000000 50% 14.500000 0.530000 0.52000 0.000000 75% 24.000000 0.730000 0.67250 1.000000

0.900000

Distribution of Case Outcomes

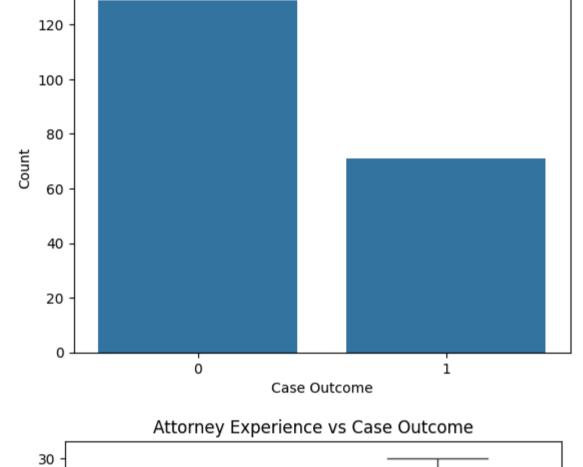
1.000000

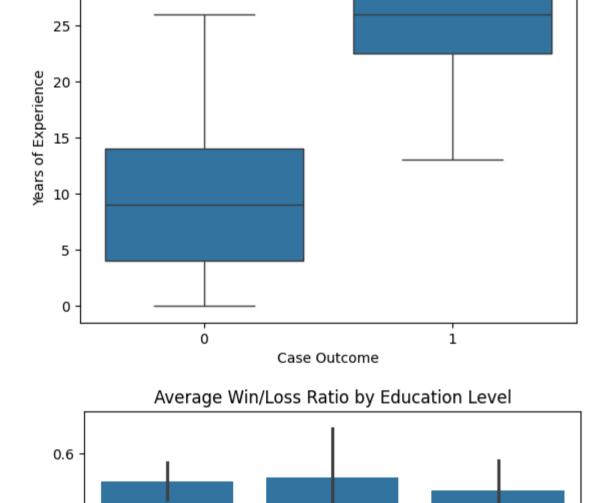
0.89000

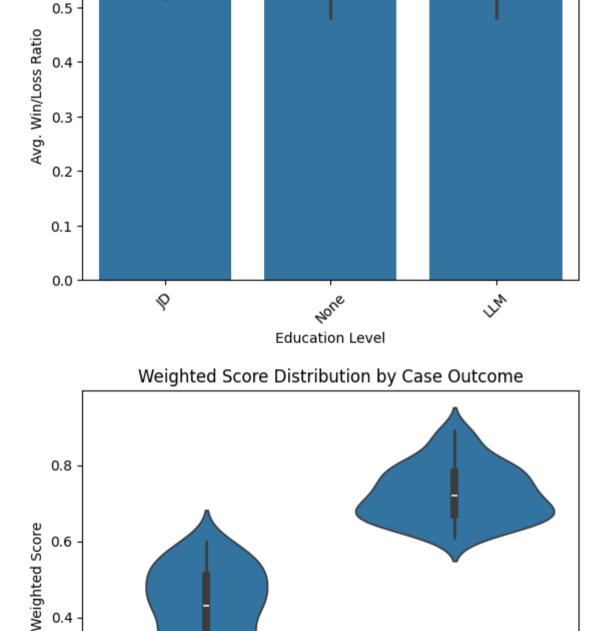
Experience\_Years Win\_Loss\_Ratio Education\_Level Weighted\_Score 0 Case\_Outcome dtype: int64

Missing values:

None







Case Outcome

1

0.4

0.2

0

