```
In [7]: import pandas as pd
        import matplotlib.pyplot as plt
        import seaborn as sns
        df = pd.read_csv('E:/AIML/mtcars.CSV')

        plt.figure(figsize=(8, 6))
        plt.hist(df['mpg'], bins=10, edgecolor='k')
        plt.title('Histogram of MPG (Miles per gallon)')
        plt.xlabel('MPG')
        plt.ylabel('Frequency')
        plt.show()

        plt.figure(figsize=(8, 6))
        sns.scatterplot(data=df, x='wt', y='mpg')
        plt.title('Scatter Plot of MPG vs. Weight')
        plt.xlabel('Weight')
        plt.ylabel('MPG')
        plt.show()

        plt.figure(figsize=(8, 6))
        sns.countplot(data=df, x='am')
        plt.title('Bar Plot of Transmission Type')
        plt.xlabel('Transmission Type (0=Automatic, 1=Manual)')
        plt.ylabel('Frequency')
        plt.show()

        plt.figure(figsize=(8, 6))
        sns.boxplot(data=df, x='mpg')
        plt.title('Box Plot of MPG')
        plt.xlabel('MPG')
        plt.show()
```
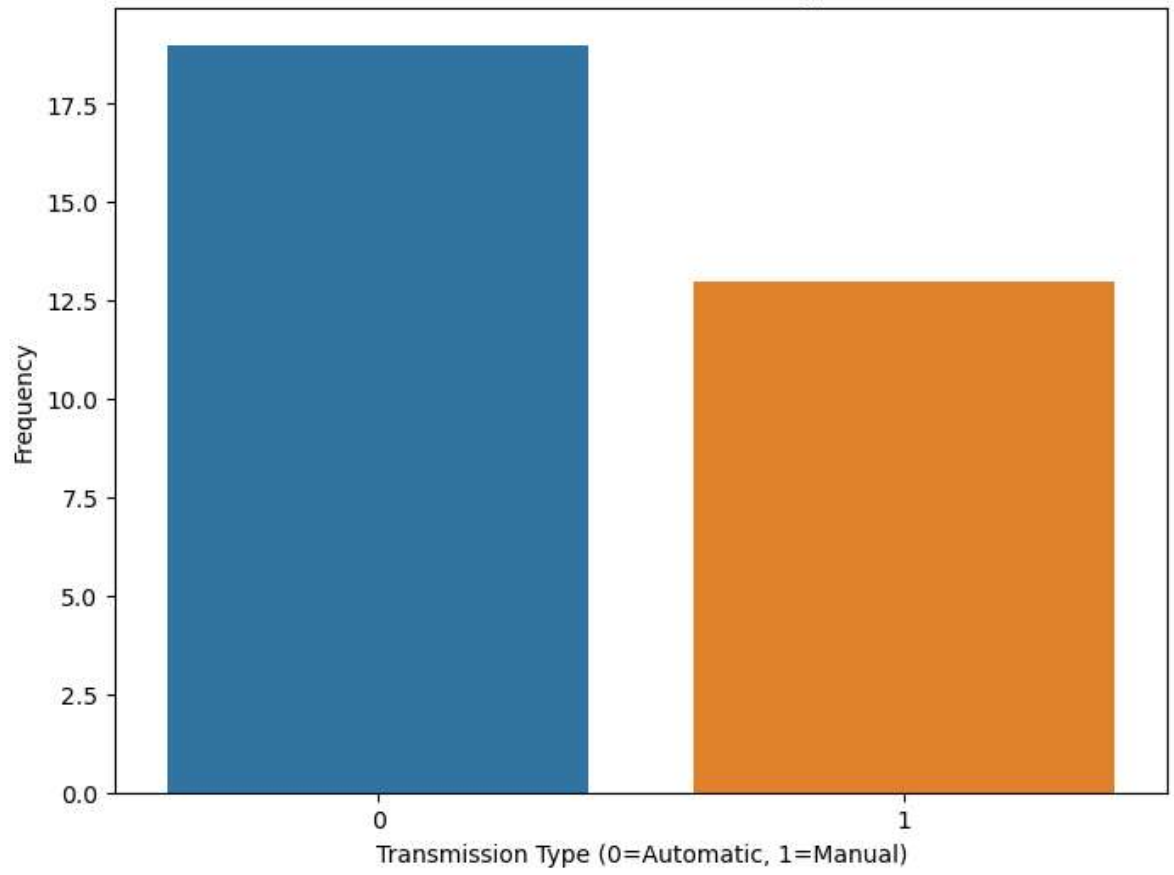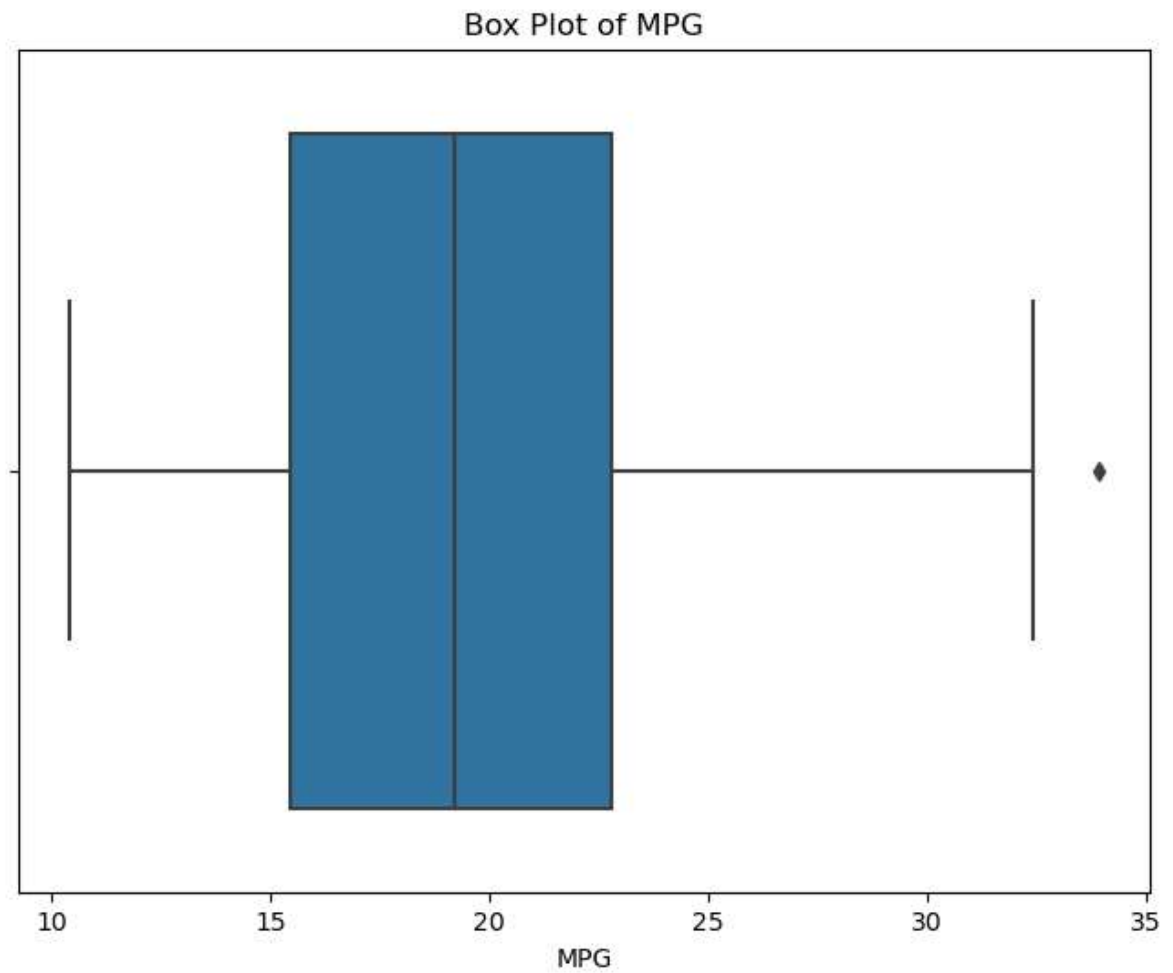
Histogram of MPG (Miles per gallon)



Scatter Plot of MPG vs. Weight

Bar Plot of Transmission Type

## Box Plot of MPG
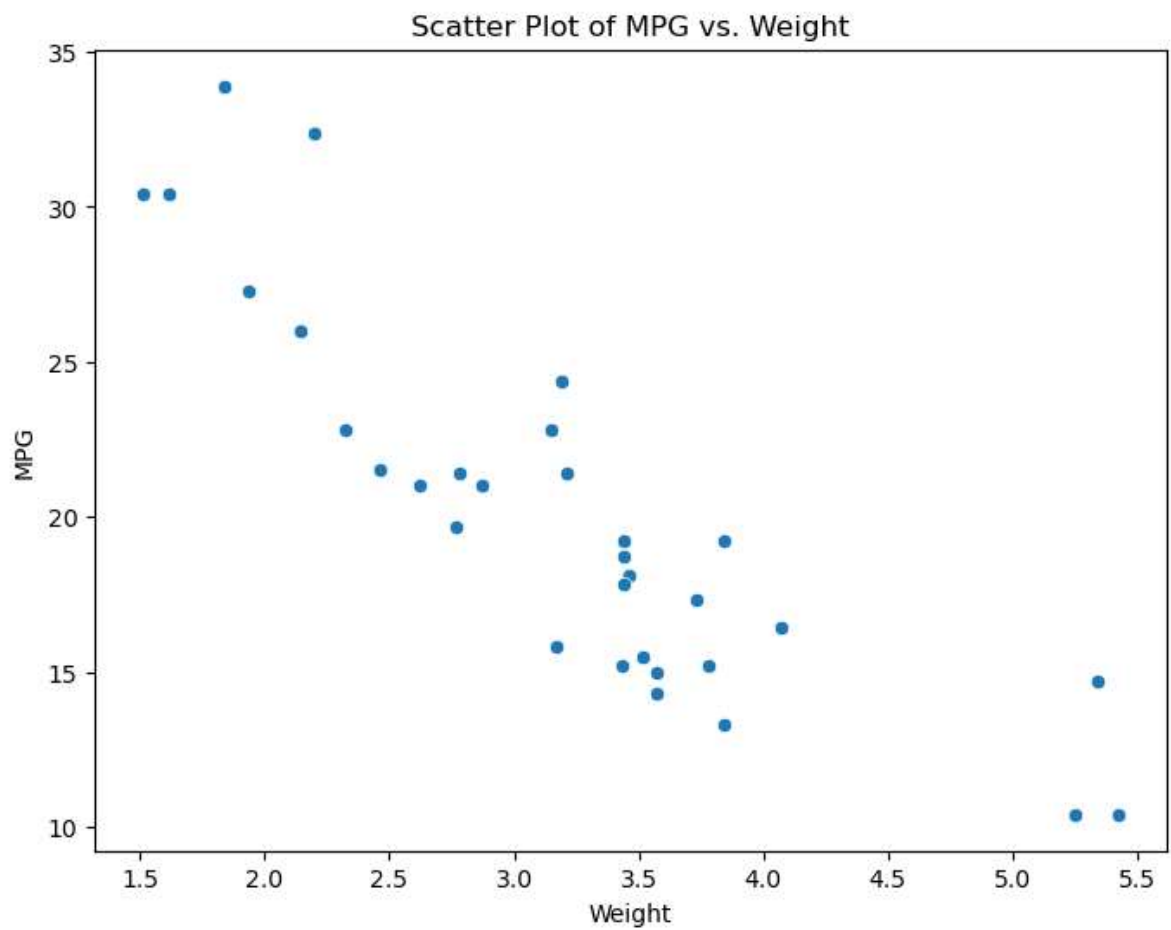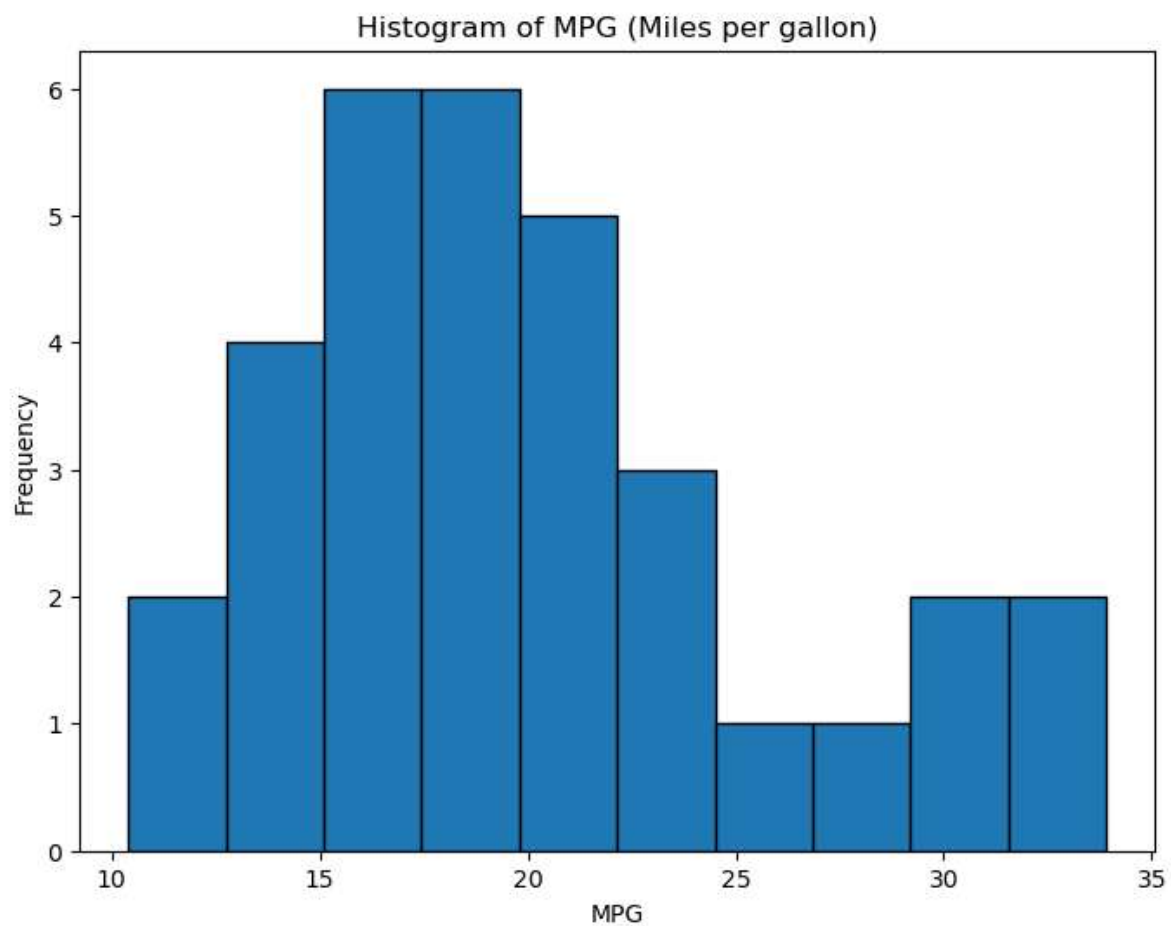


In [6]:
```python
import pandas as pd

df = pd.read_csv('E:/AIML/tejas 34.CSV')
df['Count'] = df.groupby('Book_Type')['id'].transform('count')

print(df)
```

```
  Book_Name  Book_Type  id  Count
0     Book1      Maths   1      2
1     Book2    Physics   1      2
2     Book3   Computer   1      2
3     Book4    Science   1      2
4     Book5      Maths   1      2
5     Book6    Physics   1      2
6     Book7   Computer   1      2
7     Book8    Science   1      2
```

In [ ]: