In [1]:
```
import csv

# Data
years = [2013, 2014, 2015, 2016, 2017, 2018, 2019]
deliveries = [22442, 31655, 50517, 76243, 103091, 245491, 367656]
annual_revenue = [15000000, 112000000, 117000000, 204000000, 4130000000, 700

# Create CSV file
with open('tesla_data.csv', 'w', newline='') as csvfile:
    fieldnames = ['Year', 'Deliveries', 'AnnualRevenue']
    writer = csv.DictWriter(csvfile, fieldnames=fieldnames)

    # Write header
    writer.writeheader()

    # Write data rows
    for i in range(len(years)):
        writer.writerow({'Year': years[i], 'Deliveries': deliveries[i], 'Ann
```

In [2]:
```
import pandas as pd

# Load the data from the CSV file
df = pd.read_csv('tesla_data.csv')

# Display the data
print(df)
```

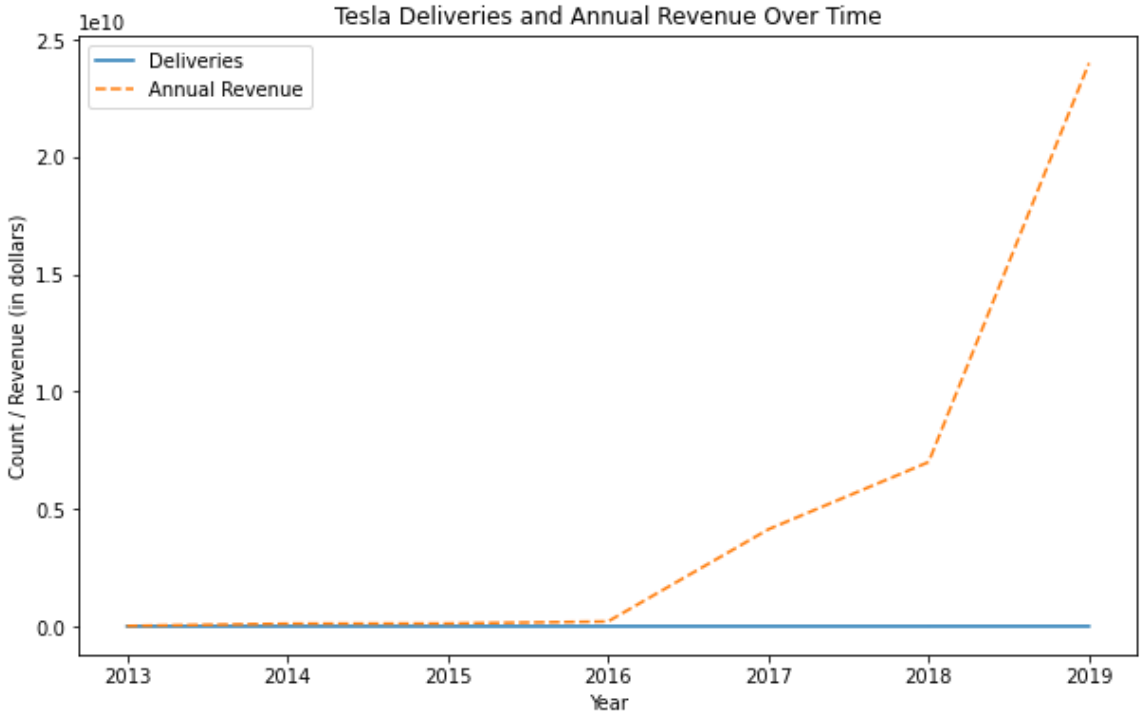
```
   Year  Deliveries  AnnualRevenue
0  2013       22442       15000000
1  2014       31655      112000000
2  2015       50517      117000000
3  2016       76243      204000000
4  2017      103091     4130000000
5  2018      245491     7000000000
6  2019      367656    24000000000
```

In [3]:
```
import matplotlib.pyplot as plt

# Plot time series
plt.figure(figsize=(10, 6))
plt.plot(df['Year'], df['Deliveries'], label='Deliveries')
plt.plot(df['Year'], df['AnnualRevenue'], label='Annual Revenue', linestyle=

# Add labels and legend
plt.xlabel('Year')
plt.ylabel('Count / Revenue (in dollars)')
plt.title('Tesla Deliveries and Annual Revenue Over Time')
plt.legend()

# Show the plot
plt.show()
```



In [4]:
```
from statsmodels.tsa.arima.model import ARIMA

# Fit ARIMA model
model = ARIMA(df['AnnualRevenue'], order=(1, 1, 1))
results = model.fit()

# Forecast
forecast_steps = 1
forecast = results.get_forecast(steps=forecast_steps)

# Print the forecast
print(forecast.predicted_mean)
```

```
C:\Users\PRASANTA\anaconda3\lib\site-packages\statsmodels\tsa\statespace\sa
rimax.py:966: UserWarning: Non-stationary starting autoregressive parameter
s found. Using zeros as starting parameters.
  warn('Non-stationary starting autoregressive parameters'
C:\Users\PRASANTA\anaconda3\lib\site-packages\statsmodels\tsa\statespace\sa
rimax.py:978: UserWarning: Non-invertible starting MA parameters found. Usi
ng zeros as starting parameters.
  warn('Non-invertible starting MA parameters found.'

7    3.886612e+10
dtype: float64
```

so the revenue in 2020 is 38.86612 billion

In [ ]: