Financial Analysis

```
#importing Libraries

import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

#importing files

url =
'https://raw.githubusercontent.com/NikhilM-632/ik-files/main/Financial
%20Analytics%20Dataset.csv'
df = pd.read_csv(url)

df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 488 entries, 0 to 487
Data columns (total 4 columns):
 #   Column              Non-Null Count  Dtype  
---  ------              --------------  -----  
 0   S.No.               488 non-null    int64  
 1   Name                488 non-null    object 
 2   Mar Cap - Crore     479 non-null    float64
 3   Sales Qtr - Crore   459 non-null    float64
dtypes: float64(2), int64(1), object(1)
memory usage: 15.4+ KB
```

```
df.head()
```

```
   S.No.             Name  Mar Cap - Crore  Sales Qtr - Crore
0      1  Reliance Inds.        583436.72           99810.00
1      2             TCS        563709.84           30904.00
2      3       HDFC Bank        482953.59           20581.27
3      4             ITC        320985.27            9772.02
4      5         H D F C        289497.37           16840.51
```

```
df.nunique()
```

```
S.No.                488
Name                 488
Mar Cap - Crore      479
Sales Qtr - Crore    459
dtype: int64
```

```
df_clean=df.dropna()
```

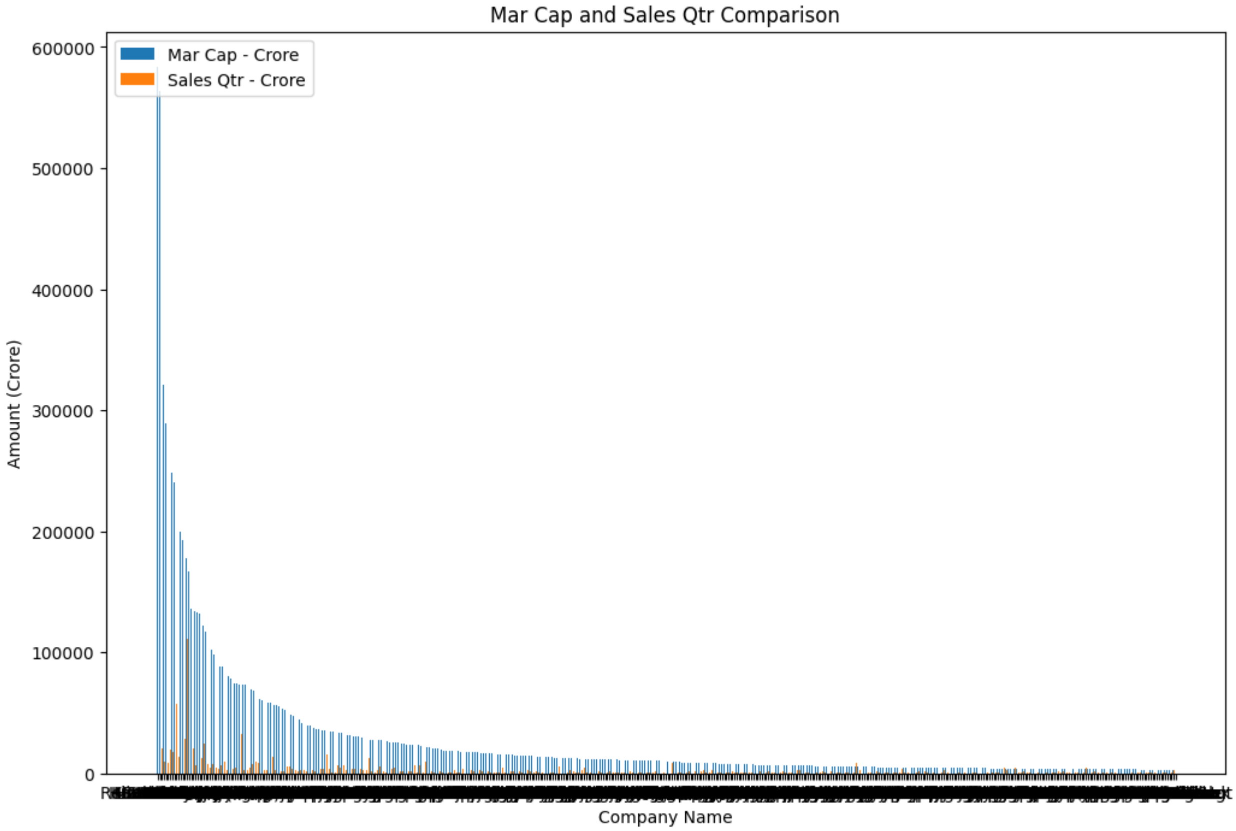
```
df_clean.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 459 entries, 0 to 486
Data columns (total 4 columns):
 #   Column              Non-Null Count  Dtype  
---  ------              --------------  -----  
 0   S.No.               459 non-null    int64  
 1   Name                459 non-null    object 
 2   Mar Cap - Crore     459 non-null    float64
 3   Sales Qtr - Crore   459 non-null    float64
dtypes: float64(2), int64(1), object(1)
memory usage: 17.9+ KB
```

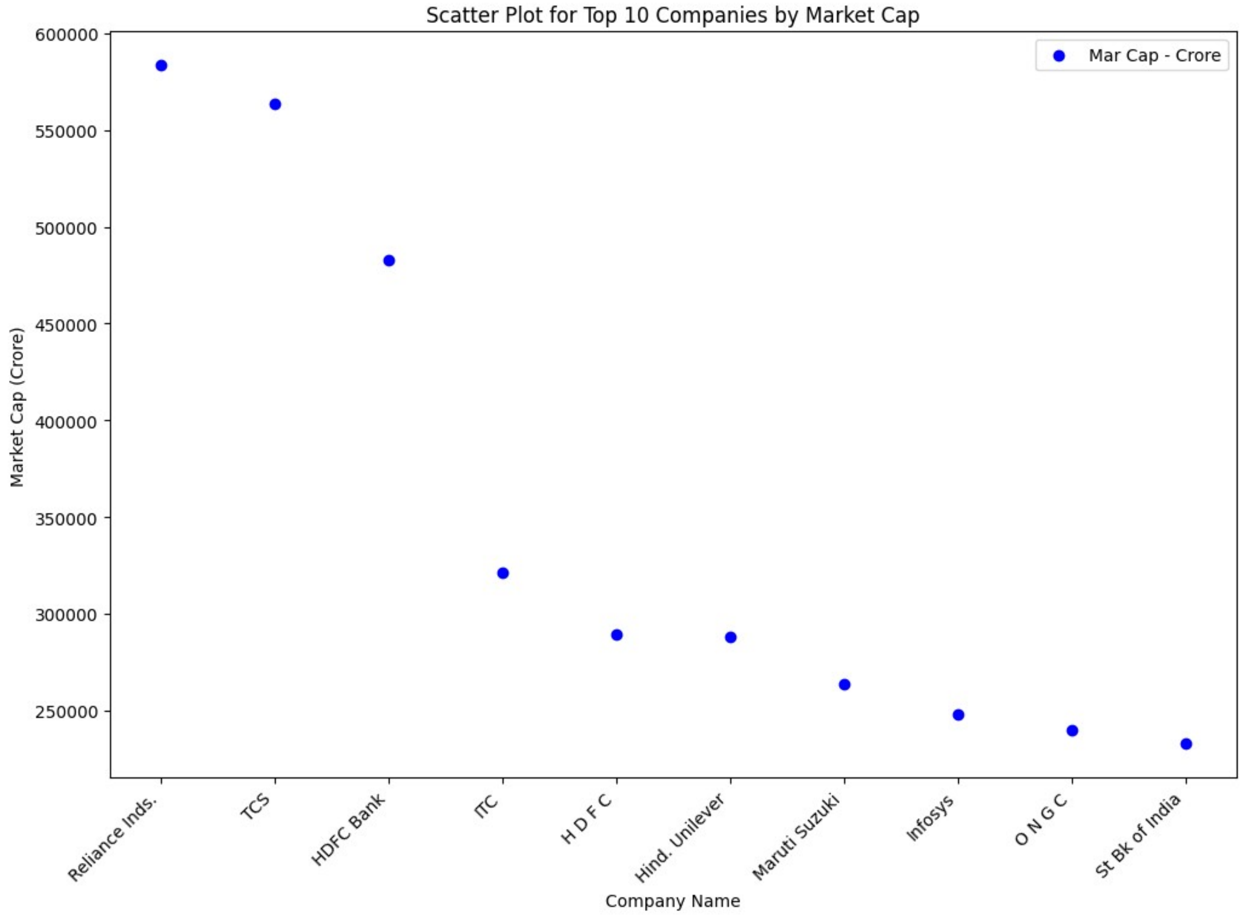
```
#Exporting the Cleaned Dataframe

df_clean.to_csv('Financial-Analysis-Data(Clean).csv', index=False)
```

EDA (Exploratory Data Analysis)

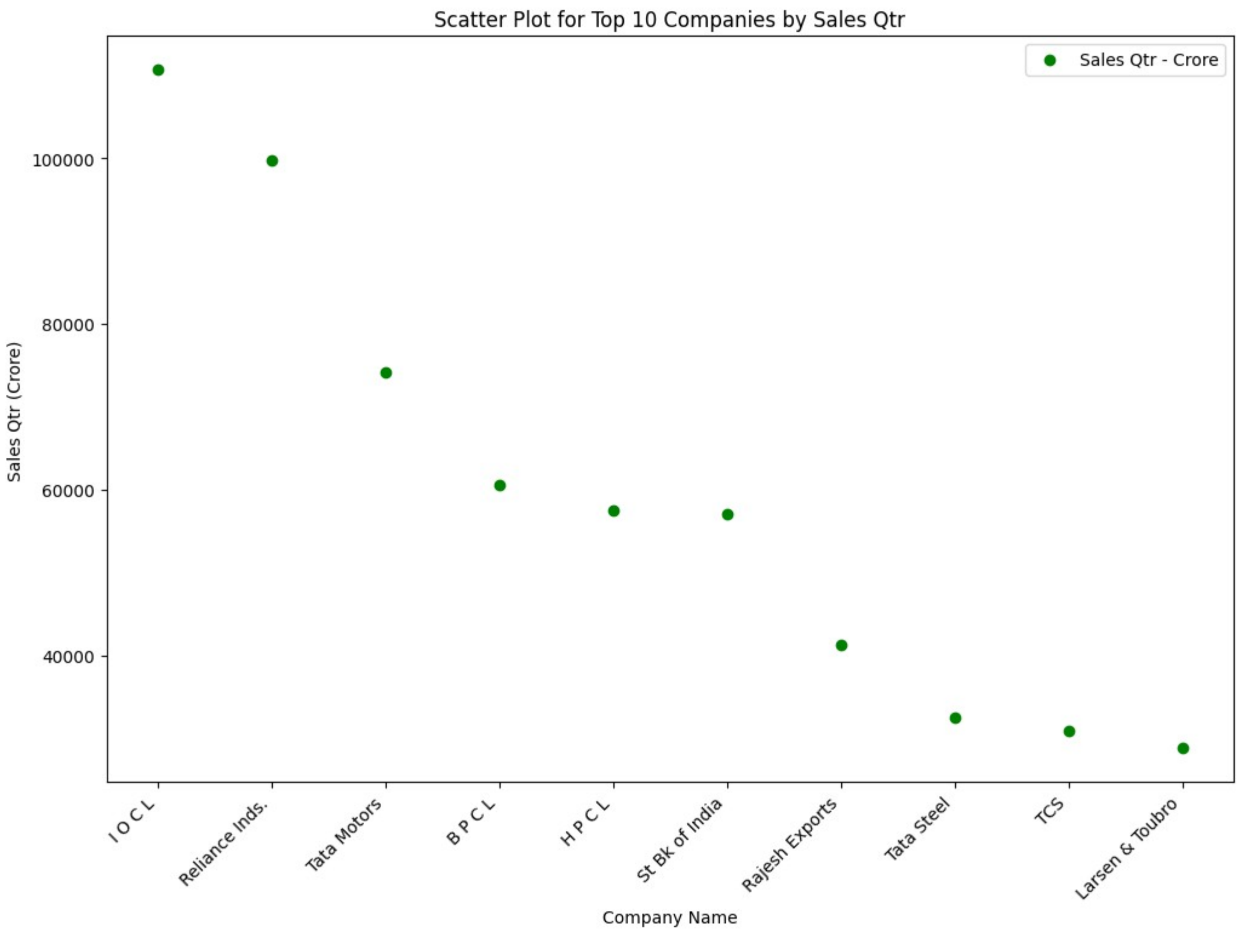
```
plt.figure(figsize=(12,8))

bar_width = 0.35
index = range(len(df['Name']))

plt.bar(index, df['Mar Cap - Crore'], bar_width, label='Mar Cap -
Crore')
plt.bar([i + bar_width for i in index], df['Sales Qtr - Crore'],
bar_width, label='Sales Qtr - Crore')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Amount (Crore)')
plt.title('Mar Cap and Sales Qtr Comparison')
plt.xticks([i + bar_width/2 for i in index], df['Name'])
plt.legend()

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



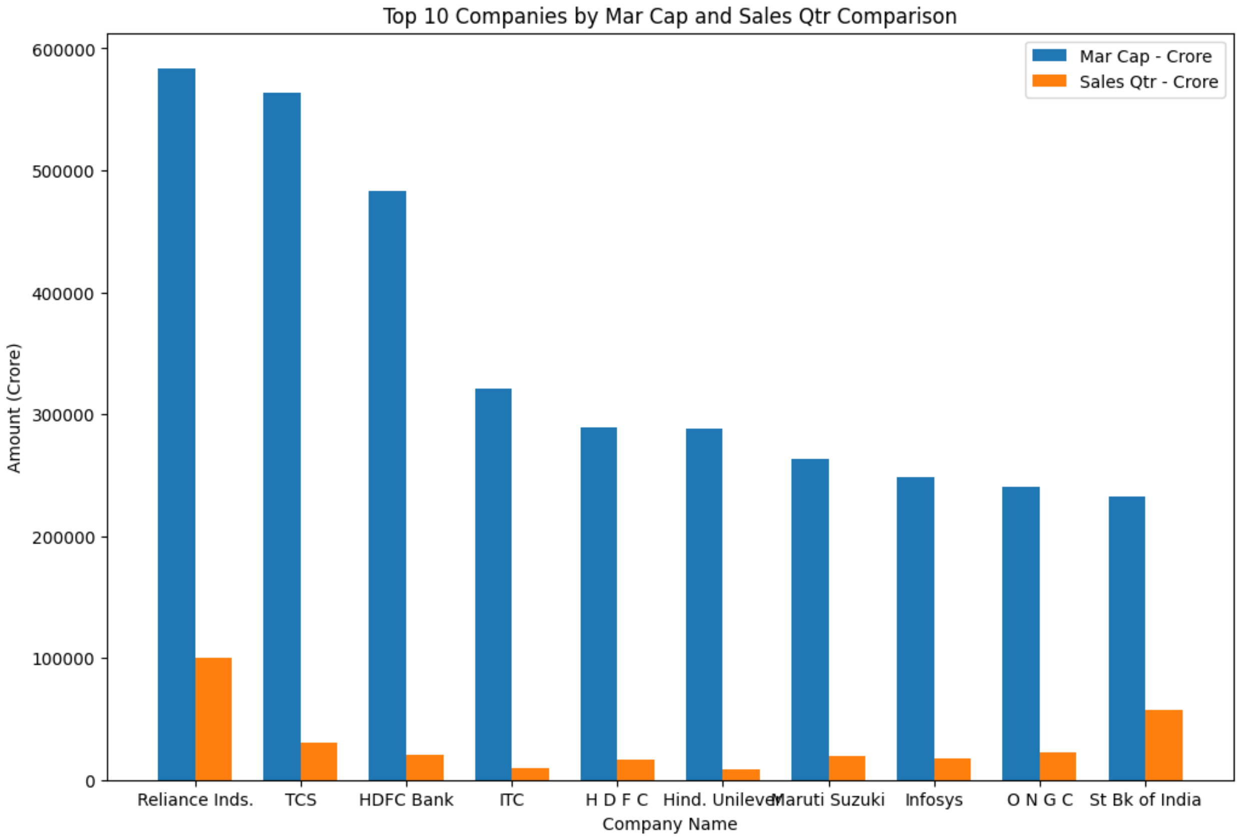
```
# Sort the DataFrame by 'Mar Cap - Crore' in descending order and
select the top 10 rows
top_companies = df.sort_values(by='Mar Cap - Crore',
ascending=False).head(10)

# Plotting the scatter plot for the top 10 companies
plt.figure(figsize=(12,8))

plt.scatter(top_companies['Name'], top_companies['Mar Cap - Crore'],
label='Mar Cap - Crore', color='blue')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Market Cap (Crore)')
plt.title('Scatter Plot for Top 10 Companies by Market Cap')
plt.xticks(rotation=45, ha='right')
plt.legend()

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



```python
# Sort the DataFrame by 'Sales Qtr - Crore' in descending order and
select the top 10 rows
top_companies_sales = df.sort_values(by='Sales Qtr - Crore',
ascending=False).head(10)

# Plotting the scatter plot for the top 10 companies by sales
plt.figure(figsize=(12,8))

plt.scatter(top_companies_sales['Name'], top_companies_sales['Sales
Qtr - Crore'], label='Sales Qtr - Crore', color='green')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Sales Qtr (Crore)')
plt.title('Scatter Plot for Top 10 Companies by Sales Qtr')
plt.xticks(rotation=45, ha='right')
plt.legend()

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

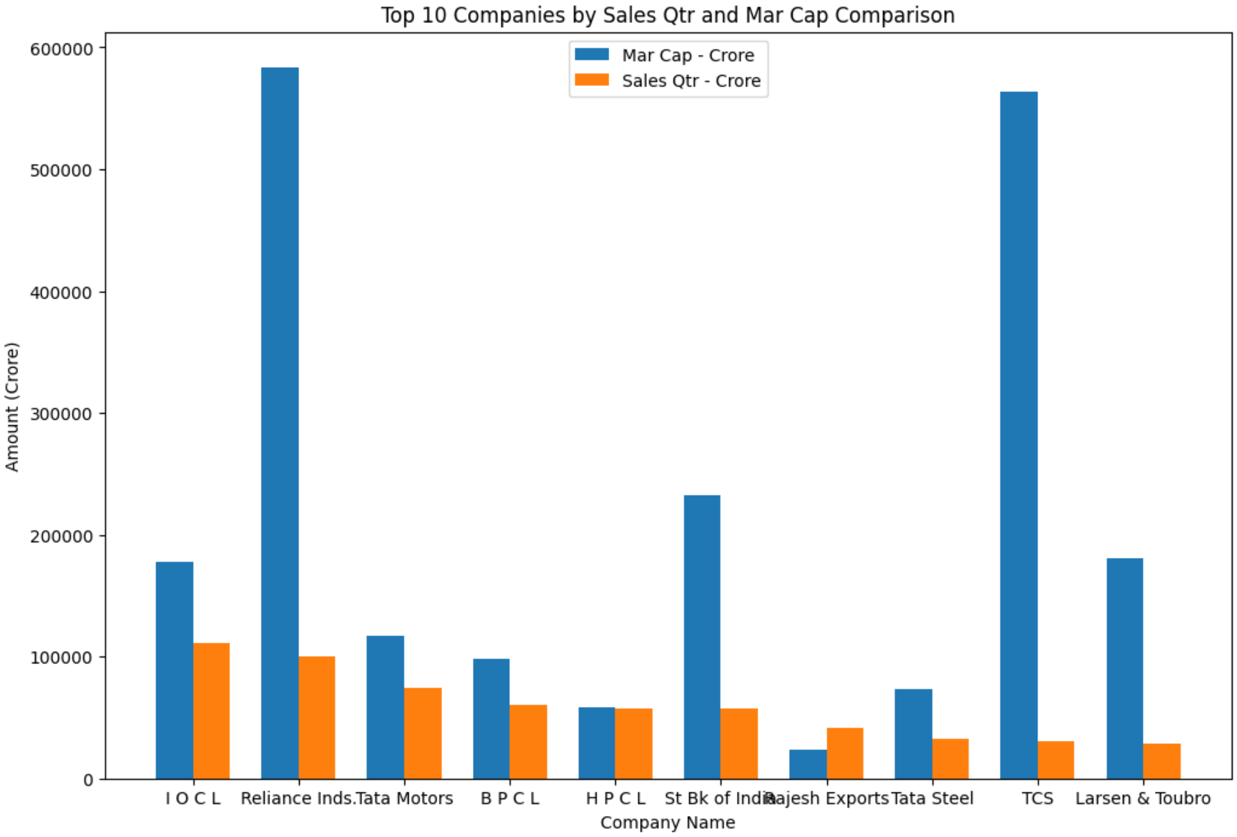


```python
# Sort the DataFrame by 'Mar Cap - Crore' in descending order and select the top 10 rows
top_companies = df.sort_values(by='Mar Cap - Crore', ascending=False).head(10)

# Plotting the bar graph for the top 10 companies
plt.figure(figsize=(12,8))

bar_width = 0.35
index = range(len(top_companies['Name']))

plt.bar(index, top_companies['Mar Cap - Crore'], bar_width, label='Mar Cap - Crore')
plt.bar([i + bar_width for i in index], top_companies['Sales Qtr - Crore'], bar_width, label='Sales Qtr - Crore')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Amount (Crore)')
plt.title('Top 10 Companies by Mar Cap and Sales Qtr Comparison')
plt.xticks([i + bar_width/2 for i in index], top_companies['Name'])
plt.legend()

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

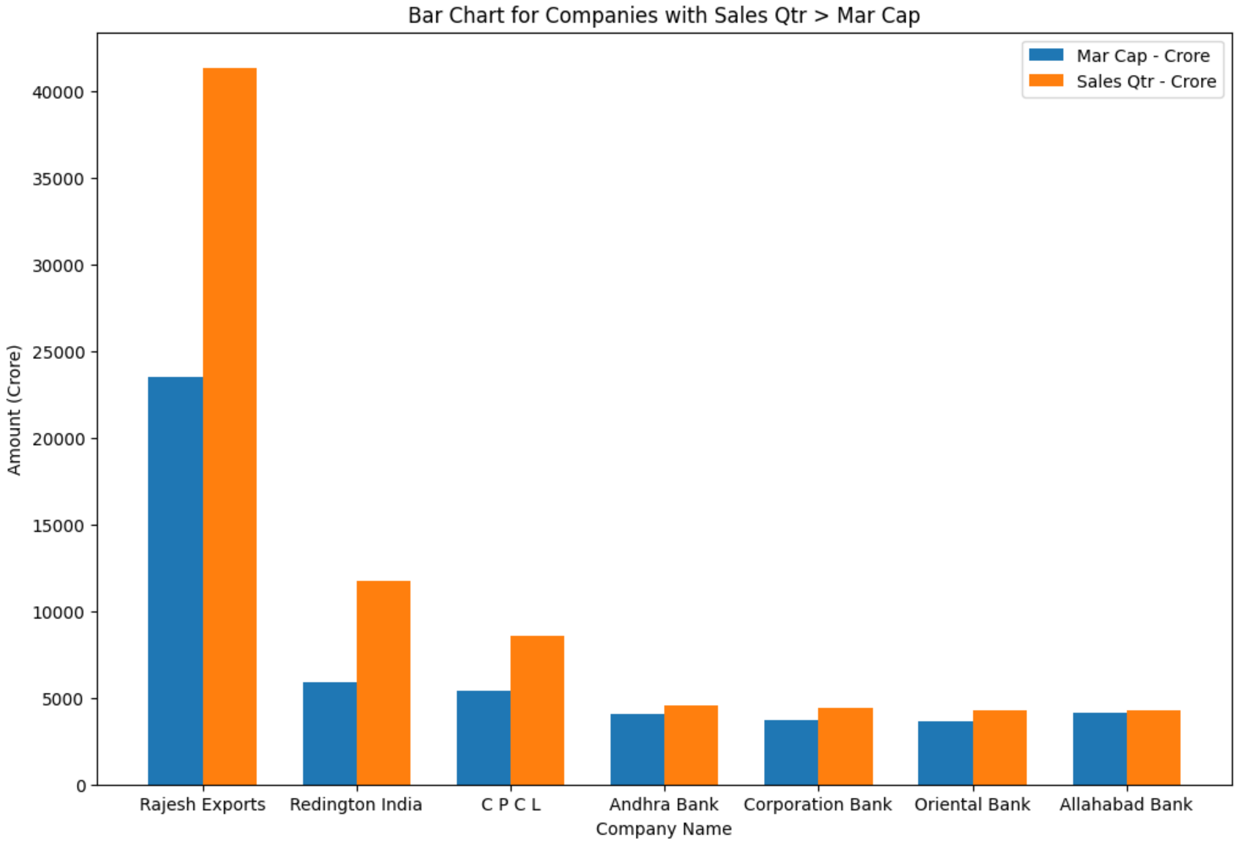


```
top_companies_sales = df.sort_values(by='Sales Qtr - Crore',
ascending=False).head(10)

# Plotting the bar graph for the top 10 companies by sales
plt.figure(figsize=(12,8))

bar_width = 0.35
index = range(len(top_companies_sales['Name']))

plt.bar(index, top_companies_sales['Mar Cap - Crore'], bar_width,
label='Mar Cap - Crore')
plt.bar([i + bar_width for i in index], top_companies_sales['Sales Qtr
- Crore'], bar_width, label='Sales Qtr - Crore')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Amount (Crore)')
plt.title('Top 10 Companies by Sales Qtr and Mar Cap Comparison')
plt.xticks([i + bar_width/2 for i in index],
```

```python
top_companies_sales['Name'])
plt.legend()

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



```python
filtered_companies = df[df['Sales Qtr - Crore'] > df['Mar Cap -
Crore']]
filtered_companies = filtered_companies.sort_values(by='Sales Qtr -
Crore',ascending=False)
# Plotting the bar chart
plt.figure(figsize=(12,8))

bar_width = 0.35
index = range(len(filtered_companies['Name']))

plt.bar(index, filtered_companies['Mar Cap - Crore'], bar_width,
label='Mar Cap - Crore')
plt.bar([i + bar_width for i in index], filtered_companies['Sales Qtr
- Crore'], bar_width, label='Sales Qtr - Crore')

# Adding labels and title
plt.xlabel('Company Name')
plt.ylabel('Amount (Crore)')
plt.title('Bar Chart for Companies with Sales Qtr > Mar Cap')
plt.xticks([i + bar_width/2 for i in index],
filtered_companies['Name'])
plt.legend()

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


Bar Chart for Companies with Sales Qtr > Mar Cap
Mar Cap - Crore
Sales Qtr - Crore
Amount (Crore)
Rajesh Exports
Redington India
C P C L
Andhra Bank
Corporation Bank
Oriental Bank
Allahabad Bank
Company Name