

Plotting a Visual Takeover

The executive team has recently partnered up with a business INtelligence company to create a BI platform rooted in digital dashboards. In order to help the initiative, you need to convert all Pandas/Matplotlib visualizations referred to in this document to hvplot visualisations.

```
[1]: # Import libraries and dependencies
import pandas as pd
from pathlib import Path
```

```
[2]: # Import hvplot
import hvplot.pandas
```

Prepare Data

```
[3]: # Set the path
file_path = Path("../Resources/sp500_companies.csv")

# Read in the CSV as a DataFrame
sp500_companies_csv = pd.read_csv(file_path)

sector_count = sp500_companies_csv['Sector'].value_counts()

# Count the frequency of each sector from the list of companies
sector_count = sp500_companies_csv['Sector'].value_counts()

# Grab the 'Symbol' and 'Market Cap' columns
market_cap = sp500_companies_csv.loc[:, ['Symbol', 'Market Cap']]

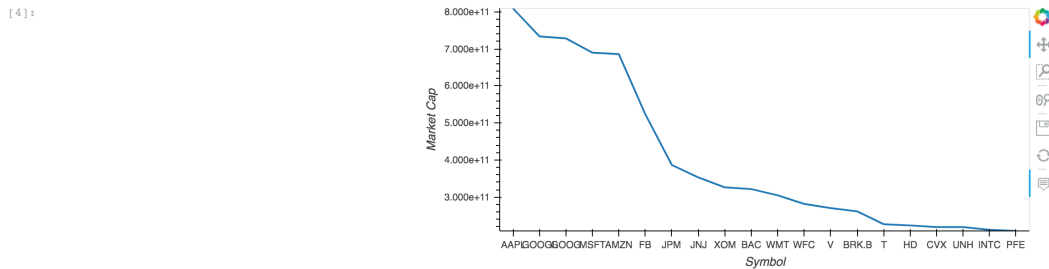
# Set the 'Symbol' as the index
market_cap.set_index(market_cap['Symbol'], inplace=True)

# Drop the extra 'Symbol' column
market_cap.drop(columns=['Symbol'], inplace=True)

# Filter down to 20 companies with the largest market caps
top_20_market_cap = market_cap.nlargest(20, 'Market Cap')
```

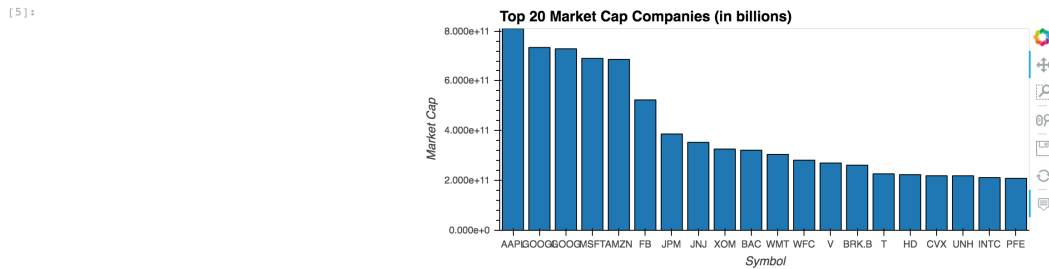
Create Plot Using hvplot()

```
[4]: # Generate standard hvplot
top_20_market_cap.hvplot()
```



Create Bar Plot Using hvplot.bar()

```
[5]: # Plot a hvplot bar chart of the top 20 market cap companies
top_20_market_cap.hvplot.bar(title='Top 20 Market Cap Companies (in billions)')
```



Create Scatter Plot Using hvplot(kind=)

```
[6]: # Plot a scatter plot using hvplot function to display the relationship between price vs. earnings/share
sp500_companies_csv.hvplot(kind='scatter', x='Earnings/Share', y='Price')
```

