# **Problem Statement**

Analysis of the Forbes2000 companies 2019 list to derive conclusions based on Profits, Market cap, Assets and Revenue.

# **Data Sources**

* Forbes Global 2000 list for 2019 ([Link](https://query.data.world/s/t46xrwtskjcedhgmz2sc2mj33bzog7))

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* API to get the latitude and longitude of the headquarters of the companies

<http://api.worldbank.org/v2/country/br?format=json>

# **Goals of the Analysis**

* Find the Top 10 companies based on market cap, profits, sales and assets – Horizontal bar chart – affected by filter - Raj
* Visualise profit by sectors across continents – Heat Map – not affected by filter - Vijay
* Visualise which sectors are heavily represented in the Top 2000 companies – Histogram – affected by filter - Amber
* Find the correlation between profits vs market cap and profits vs assets – Scatter Plot with regression – affected by filter - Suhas
* Plotting Heat map based on profits and market cap – country wise plot

Not affected by country filter (explore if we can show min and max profits for the country selected) - Vijay

* Applying markers on the map for the headquarters of the company – for exploration - Raj
* Text pertaining to the data for the selected country

# **Description of Data Analysis Tools**

* Read the input csv file using Pandas and load the data into Postgres database
* Through Flask connect to the database using SQLAlchemy and select the records
* Jsonify the data and return it to be used in JavaScript as an API call
* Create a Dashboard for Visualizations using HTML
* Visualizations will be rendered using Leaflet.js, Plotly and D3.js

# **Data Products the Project Will Produce**

#### GitHub repository - [Link](https://github.com/vijay-mygit/Project_2)

Sample Visualizations

Distribution of companies by sector

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Top companies based on Profits, Assets, Market Cap and Revenue

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Heatmap of Market Cap and Profits

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