

```
In [1]: import pandas as pd
df = pd.read_csv('BCG_dataset.csv')
print("Year by Year Average Growth from 2023 to 2025")
df
```

Year by Year Average Growth from 2023 to 2025

```
Out[1]:
```

	Unnamed: 0	Company	Revenue Growth (%)	Net Income Growth (%)	Assets Growth (%)	Liabilities Growth (%)	Cash Flow from Operations Growth (%)
0	0	Apple	0.30	2.12	-1.12	-0.57	1.33
1	1	Microsoft	-6.66	-5.79	-10.33	-6.40	-8.15
2	2	Tesla	-5.59	31.06	-11.81	-8.80	-0.03

```
In [2]: import pandas as pd
df = pd.read_csv('Task1_data.csv')
print("Annual data 2023 to 2025")
df
```

Annual data 2023 to 2025

```
Out[2]:
```

	Company	Year	Total Revenue	Net Income	Total Assets	Total Liabilities	Cash Flow from Operating Expenses	Revenue Growth (%)	Net Income Growth (%)	Assets Growth (%)	Liabilities Growth (%)	Cash Flow from Operations Growth (%)
0	Microsoft	2024	245122	88136	512163	243686	118548	0.00	0.00	0.00	0.00	0.00
1	Microsoft	2023	211915	72361	411976	205753	87582	-13.55	-17.90	-19.56	-15.57	-26.12
2	Microsoft	2022	198270	72738	364840	198298	89035	-6.44	0.52	-11.44	-3.62	1.66
3	Tesla	2024	97690	7153	122070	48390	14923	0.00	0.00	0.00	0.00	0.00
4	Tesla	2023	96773	14974	106618	43009	13256	-0.94	109.34	-12.66	-11.12	-11.17
5	Tesla	2022	81462	12556	82338	36440	14724	-15.82	-16.15	-22.77	-15.27	11.07
6	Apple	2024	391035	93736	364980	308030	118254	0.00	0.00	0.00	0.00	0.00
7	Apple	2023	383285	96995	352583	290437	110543	-1.98	3.48	-3.40	-5.71	-6.52
8	Apple	2022	394328	99803	352755	302083	122151	2.88	2.89	0.05	4.01	10.50

```
In [*]: # Checking to see if the ChatBot is working in the Notebook  
%run "C:/Users/noori/PycharmProjects/PythonProject/BCG/AI.py"
```

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Hello! Welcome to AI Driven Financial Chatbot!!!

I can help you with your financial queries.

Available Companies: Apple, Microsoft, Tesla

Available Fiscal Years: 2022, 2023, 2024

Type 'exit' at any point to quit.

Enter company name: Tesla

Enter fiscal year (2022-2024): 2023

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the liabilities growth(%) ?

The Liabilities Growth for Tesla in 2023 is -11.12%

Enter company name: Apple

Enter fiscal year (2022-2024): 2024

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the total revenue?

The Total Revenue for Apple in 2024 is \$ 391035

Enter company name: Microsoft

Enter fiscal year (2022-2024): 2022

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the revenue growth (%) ?

The Revenue Growth for Microsoft in 2022 is -6.44%

Enter company name: Apple

Enter fiscal year (2022-2024): 2024

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the net income growth(%) ?

The Net Income Growth for Apple in 2024 is 0.0%

Enter company name: Tesla

Enter fiscal year (2022-2024): 2024

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the total revenue?

Sorry, I can only answer predefined financial queries.

Enter company name: Mircosoft  
Enter fiscal year (2022-2024): 2021

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the total revenue?

No data available for Mircosoft in 2021.

Enter company name: Mircosoft  
Enter fiscal year (2022-2024): 2025

Available Queries:

1. What is the total revenue?
2. What is the revenue growth (%) ?
3. What is the net income growth(%) ?
4. What is the assets growth(%) ?
5. What is the liabilities growth(%) ?

Enter your query: What is the liabilities growth(%) ?

No data available for Mircosoft in 2025.

Enter company name:

In [ ]: *# Strength: Do you easy go through the data*  
*# Weakness: Some change in the file and name can cause error and might not submit the result you want*