Pandas-AI-with-Ollama

April 29, 2024

[ ]:
```
import pandas as pd

data = pd.read_csv("data.csv")
data.head()
```

[ ]:

	Name	Age	Gender	City	Occupation	Income
0	Wang Lei	32	Male	Beijing	Teacher	10000
1	Li Wei Jia	23	Female	Shanghai	Doctor	20000
2	Zheng Xiao Gang	45	Male	Guangzhou	Policeman	10000
3	Huang Xiao Ning	28	Male	Shenzhen	Programmer	15000
4	He Li Na	35	Female	Chengdu	Lawyer	25000

[ ]:
```
from langchain_community.llms import Ollama

llm = Ollama(model="llama3")
```

[ ]:
```
from pandasai import SmartDataframe

df = SmartDataframe(data, config={"llm": llm})
```

[ ]:
```
df.chat("What are the top 5 cities for average income?")
```

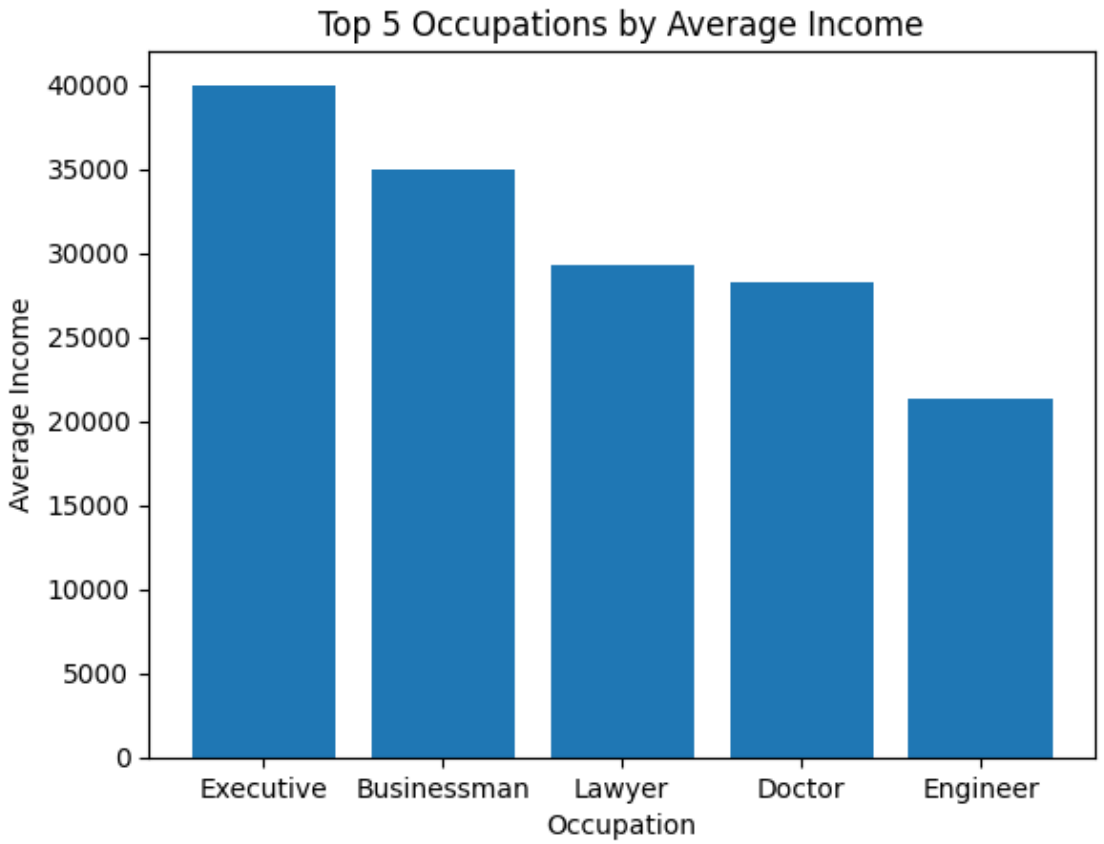
[ ]:

	City	Income
7	Qingdao	40000.0
9	Shenyang	37500.0
13	Xi'an	32500.0
5	Kunming	31500.0
1	Chengdu	26600.0

[ ]:
```
df.chat(
    "Calculate the average income for each occupation and then rank the top 5␣
 ↪occupations from highest to lowest"
)
```

```
python(6411) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
python(6413) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
```

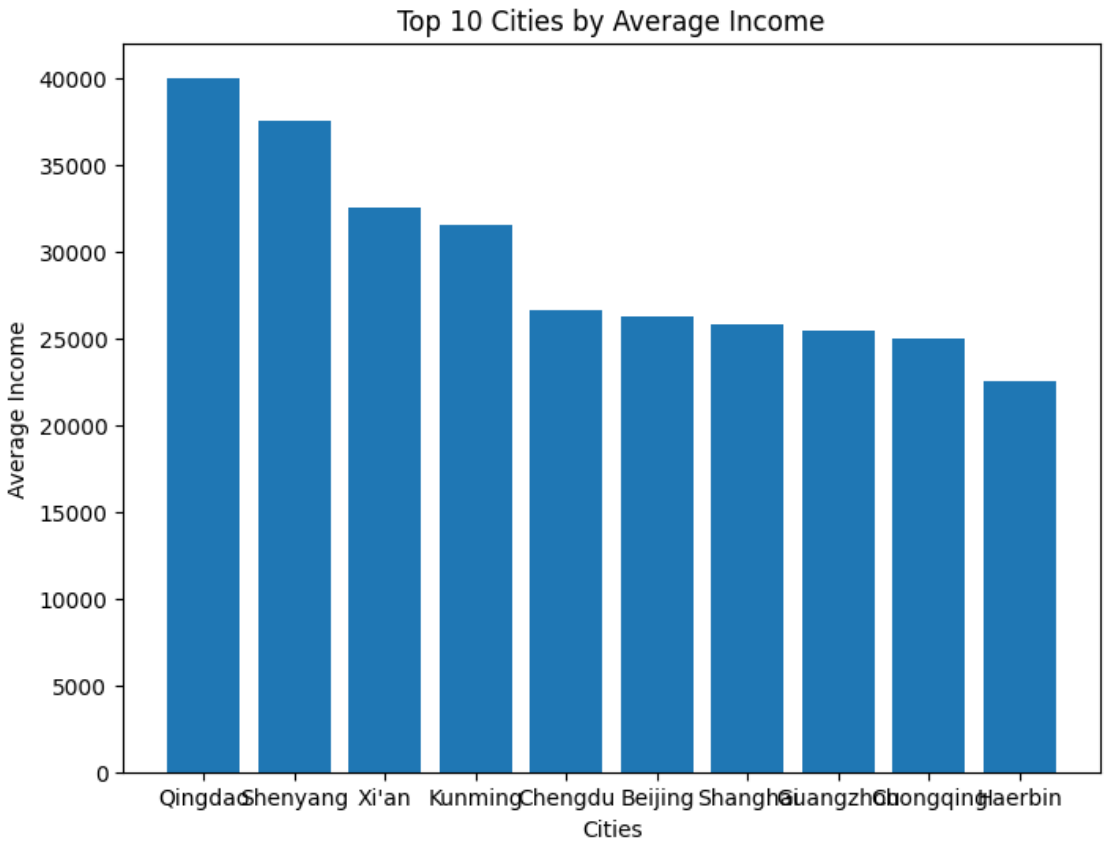
[ ]: '/Users/chi/Desktop/quartz/content/study/exports/charts/temp_chart.png'



[ ]:
```
df.chat(
    "First, sort the cities by average income from high to low, then create a␣
 ↪bar chart displaying the top 10 cities by average income"
)
```

```
python(6423) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
python(6424) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
```

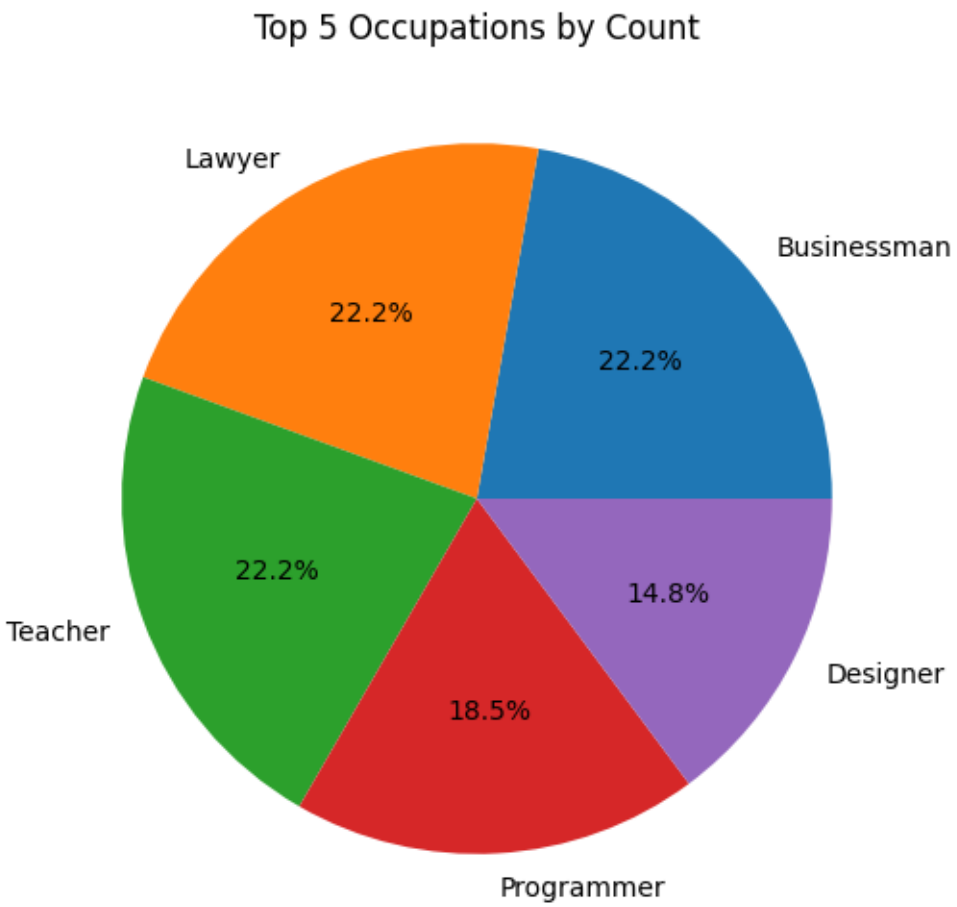
[ ]: '/Users/chi/Desktop/quartz/content/study/exports/charts/temp_chart.png'



[ ]:
```
df.chat(
    "First, calculate the number of people in each occupation, and then create␣
 ↪a pie chart for the top 5 occupations by count"
)
```

```
python(7589) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
python(7601) MallocStackLogging: can't turn off malloc stack logging because it
was not enabled.
```

[ ]:
```
'/Users/chi/Desktop/quartz/content/study/exports/charts/temp_chart.png'
```


Top 5 Occupations by Count
Lawyer
Businessman
22.2%
22.2%
22.2%
Teacher
14.8%
Designer
18.5%
Programmer