pandasai_cvs

April 29, 2024

```
[]: from dotenv import load_dotenv
     load_dotenv(override=True)
[]: True
[]: import pandas as pd
     data = pd.read_csv("data.csv")
     data.head()
[]:
                         Age Gender
                                                 Occupation Income
                   Name
                                           City
               Wang Lei
                          32
                                Male
                                        Beijing
                                                    Teacher
                                                              10000
             Li Wei Jia
                          23 Female
                                       Shanghai
                                                     Doctor
                                                              20000
     1
     2 Zheng Xiao Gang
                          45
                                Male
                                      Guangzhou
                                                  Policeman
                                                              10000
     3 Huang Xiao Ning
                                Male
                                                 Programmer
                                                              15000
                          28
                                       Shenzhen
     4
               He Li Na
                                                              25000
                          35 Female
                                        Chengdu
                                                     Lawyer
[]: import os
     from langchain_groq.chat_models import ChatGroq
     llm = ChatGroq(
         model_name="mixtral-8x7b-32768",
         api_key=os.environ["GROQ_API_KEY"],
     )
[]: from pandasai import SmartDataframe
     df = SmartDataframe(data, config={"llm": llm})
[]: df.chat("What are the top 5 cities for average income?")
[]:
                Income
     City
               40000.0
     Qingdao
     Shenyang
               37500.0
    Xi'an
               32500.0
```

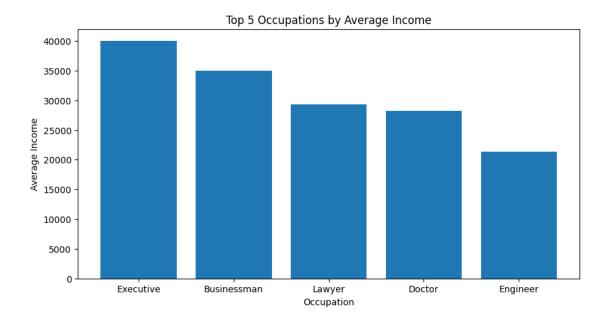
```
Kunming 31500.0
Chengdu 26600.0
```

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

<string>:2: FutureWarning: The default value of numeric_only in
DataFrameGroupBy.mean is deprecated. In a future version, numeric_only will
default to False. Either specify numeric_only or select only columns which
should be valid for the function.

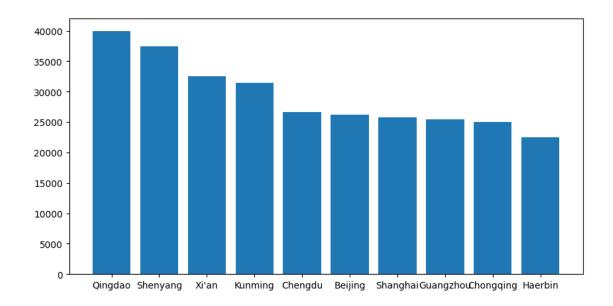
[]: '/Users/chi/Desktop/quartz/content/study/exports/charts/temp_chart.png'



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```
[]: 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"
)
```

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



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

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

