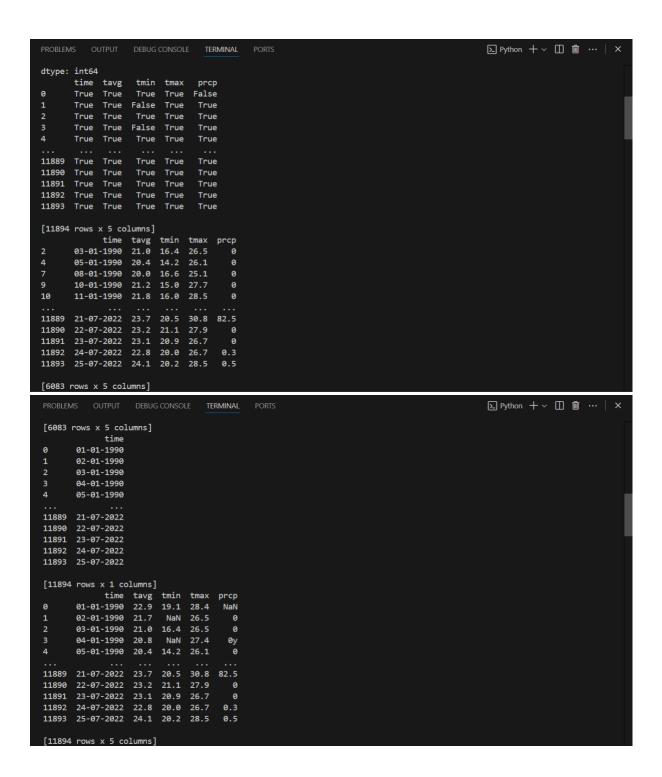
## Weather & Temperature Analysis Module

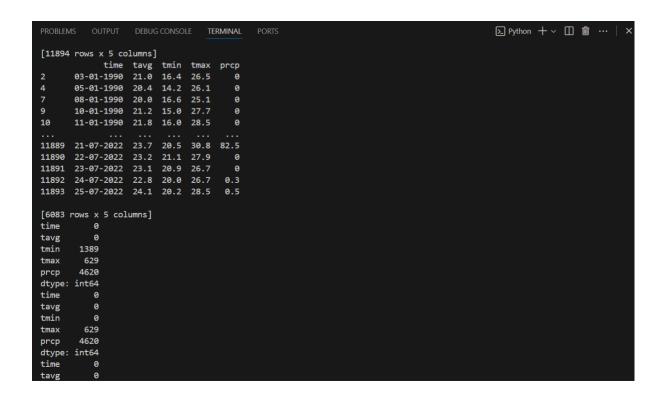
```
import pandas as pd
import matplotlib.pyplot as md
weather=pd.read_csv("weather.csv")
print(weather)
print(weather.isnull().sum())
print(weather.notnull())
print(weather.dropna())
print(weather.dropna(axis=1))
print(weather.dropna(axis=0,how='all'))
print(weather.dropna(how='any'))
weather['tavg']=weather['tavg'].fillna(weather['tavg'].mean())
print(weather.isnull().sum())
weather['tmin']=weather['tmin'].fillna(weather['tmin'].mean())
print(weather.isnull().sum())
weather['tmax']=weather['tmax'].fillna(weather['tmax'].mean())
print(weather.isnull().sum())
weather['time']=pd.to_datetime(weather['time'],format="%d-%m-%Y")
weather['year']=weather['time'].dt.year
print(weather)
weather['time']=pd.to_datetime(weather['time'],format="%d-%m-%Y")
weather['month']=weather['time'].dt.month
print(weather)
yearly=weather.groupby("year")["tavg"].count()
print(yearly)
yearly=weather .groupby("year")["tavg"].mean().reset_index()
print(yearly)
md.figure(figsize=(10,5))
```

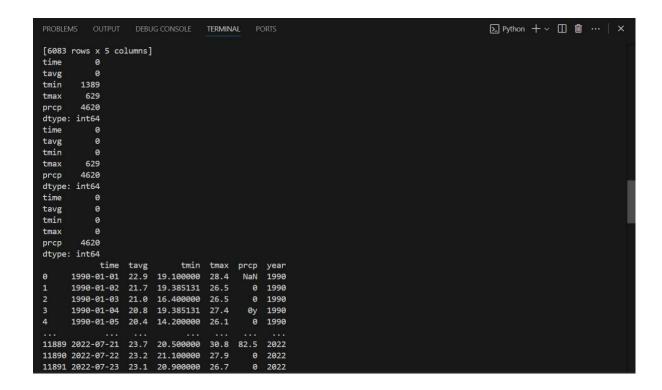
md.plot(yearly["year"],yearly["tavg"],marker='o',color='blue',linestyle='-')
md.show()

## output

```
TERMINAL
                                                                                                ∑ Python + ∨ □ · □ · · · ×
PS C:\Users\MISBA T\Desktop\python_datascience_projects\week2> & "C:\Users\MISBA T\AppData\Local\Programs\Python\Python313
/python.exe" "c:/Users/MISBA T/Desktop/python_datascience_projects/week2/index.py"
      time tavg tmin tmax prcp
01-01-1990 22.9 19.1 28.4 NaN
      02-01-1990 21.7
                         NaN 26.5
       03-01-1990 21.0 16.4 26.5
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... ... ... ... ...
11889 21-07-2022 23.7 20.5
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11892 24-07-2022 22.8 20.0 26.7
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11893 25-07-2022 24.1 20.2 28.5
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[11894 rows x 5 columns]
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```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
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11891 2022-07-23 23.1 20.990000 26.7
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11893 2022-07-25 24.1 20.200000 28.5 0.5
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                                                                 2022
2022
                                                            0.3 2022
[11894 rows x 7 columns]
year
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```
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```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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