1. 設置環境

```python
import pandas as pd
pd.plotting.register_matplotlib_converters()
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
print("Setup Complete")
```

```
Setup Complete
```

```python
# Set up code checking
import os
if not os.path.exists("../input/museum_visitors.csv"):
    os.symlink("../input/data-for-datavis/museum_visitors.csv", "../input/museum_visitors.csv")
from learntools.core import binder
binder.bind(globals())
from learntools.data_viz_to_coder.ex2 import *
print("Setup Complete")
```

```
Setup Complete
```

2. 讀檔

(資料)(博物館參訪人數)

| museum_visitors.csv (2 kB) | /kaggle/input/data-for-datavis/museum_visitors.csv | Copy |
|---|---|---|

| 📅 Date | # Avila Adobe | # Firehouse ... | # Chinese A... | # America Tr... |
|---|---|---|---|---|
| 2014-01-01 | 24778 | 4486 | 1581 | 6602 |
| 2014-02-01 | 18976 | 4172 | 1785 | 5029 |
| 2014-03-01 | 25231 | 7082 | 3229 | 8129 |
| 2014-04-01 | 26989 | 6756 | 2129 | 2824 |
| 2014-05-01 | 36883 | 10858 | 3676 | 10694 |
| 2014-06-01 | 29487 | 5751 | 2121 | 11036 |
| 2014-07-01 | 32378 | 5406 | 2239 | 13490 |

```python
# Path of the file to read
museum_filepath = "../input/museum_visitors.csv"

# Fill in the line below to read the file into a variable museum_data
museum_data = pd.read_csv(museum_filepath,index_col = "Date",parse_dates = True)

# Run the line below with no changes to check that you've loaded the data correctly
step_1.check()
```
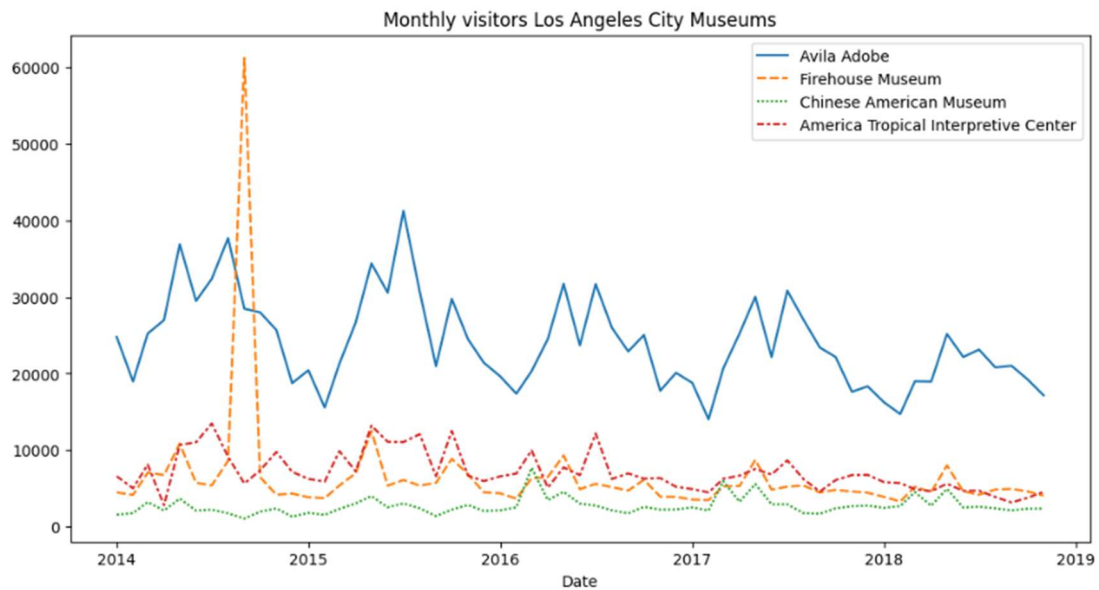
3. 一個博物館代表一條線

(Monthly visitors Los Angeles City Museums

```
)
```

```python
# Line chart showing the number of visitors to each museum over time
plt.figure(figsize=(12,6))# Set the width and height of the figure
sns.lineplot(data=museum_data)
#Add title
plt.title("Monthly visitors Los Angeles City Museums")
# Check your answer
step_3.check()
```
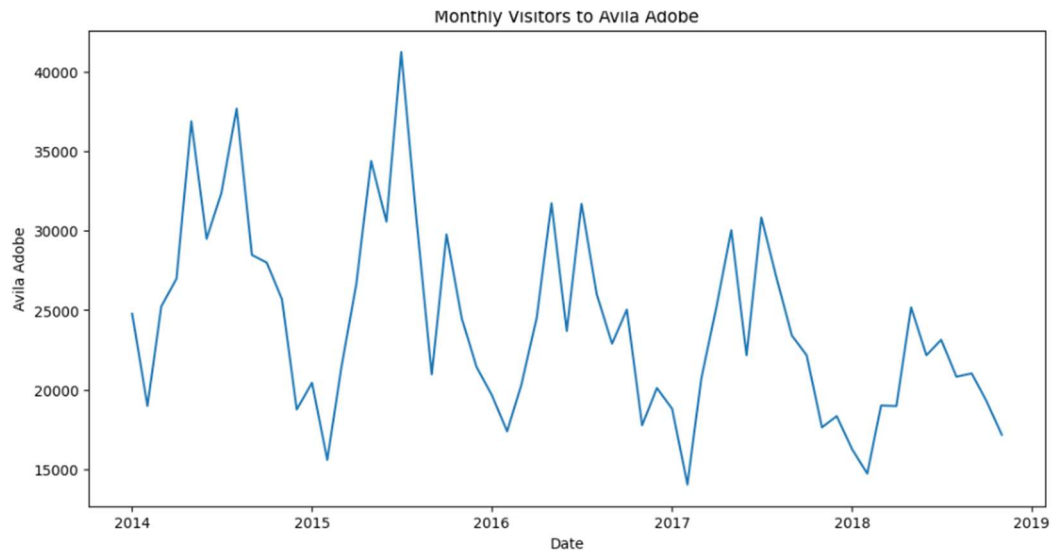


#季節性 參訪博物館 Avila Adobe

```python
# Line plot showing the number of visitors to Avila Adobe over time
#Set width and height of figure
plt.figure(figsize=(12,6))
#title
plt.title("Monthly Visitors to Avila Adobe")
#Line chart showing the number of visitors to Avila Adobe over time
sns.lineplot(data=museum_data['Avila Adobe'])
#Add label for horizontal
plt.label("Date")

# Check your answer
step_4.a.check()
```

Monthly Visitors to Avila Adobe

B:

阿維拉土坯房的遊客量哪個時段較大：

9 月至 2 月（洛杉磯的秋冬季節），還是

3 月至 8 月（洛杉磯的春夏季節）？

根據這些信息，博物館應該在什麼時候增派季節性員工？

折線圖通常在每年年初（12 月和 1 月）下降到相對較低的值，並在年中（尤其是 5 月和 6 月）達到最高值。因此，阿維拉土坯房通常在 3 月至 8 月（或春夏季節）接待更多遊客。考慮到這一點，阿維拉土坯房如果能僱用更多季節性員工來協助完成 3 月至 8 月（春夏季節）的額外工作，絕對可以受益匪淺！