

Advanced Python - Module 3 Project - Jake Duffin

Bob's Bookstore Scraper and Analysis

```
In [2]: import pandas as pd  
import requests  
from bs4 import BeautifulSoup
```

```
In [5]: response = requests.get('https://btech-data-analytics.github.io/bridgerland-technic  
soup = BeautifulSoup(response, 'html.parser')
```

```
In [16]: soup.find('table').find_all('tr', class_="book")[0].find_all('td')[1].text
```

```
Out[16]: 'Whiskers of Wisdom: Tales from Feline Philosophers'
```

```
In [28]: isbn = []  
title = []  
author = []  
language = []  
pages = []  
topic = []  
price = []  
  
for book in soup.find('table').find_all('tr', class_="book"):  
    isbn.append(book.find_all('td')[0].text)  
    title.append(book.find_all('td')[1].text)  
    author.append(book.find_all('td')[2].text)  
    language.append(book.find_all('td')[3].text)  
    pages.append(book.find_all('td')[4].text)  
    topic.append(book.find_all('td')[5].text)  
    price.append(book.find_all('td')[6].text.strip('$'))
```

```
In [30]: df = pd.DataFrame({  
    'isbn' : isbn,  
    'title' : title,  
    'author' : author,  
    'language' : language,  
    'pages' : pages,  
    'topic' : topic,  
    'price' : price,  
})
```

```
In [32]: df = df.astype({  
    'pages' : 'int64',  
    'price' : 'float64'  
})
```

```
print(df.info())
df.head()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 15 entries, 0 to 14
Data columns (total 7 columns):
 #   Column      Non-Null Count  Dtype  
--- 
 0   isbn        15 non-null    object  
 1   title       15 non-null    object  
 2   author      15 non-null    object  
 3   language    15 non-null    object  
 4   pages       15 non-null    int64   
 5   topic       15 non-null    object  
 6   price       15 non-null    float64 
dtypes: float64(1), int64(1), object(5)
memory usage: 972.0+ bytes
None
```

Out[32]:

| | isbn | title | author | language | pages | topic | price |
|---|----------------|---|---------------------|----------|-------|-------|-------|
| 0 | 978-1234567890 | Whiskers of Wisdom: Tales from Feline Philosop... | Penelope Wainwright | English | 256 | Cats | 19.99 |
| 1 | 978-2345678901 | Purrfectly Pawesome: A Cat's Life | Jasper Sterling | English | 192 | Cats | 15.99 |
| 2 | 978-3456789012 | Cat Tales: Adventures in Whiskerland | Penelope Wainwright | English | 320 | Cats | 21.99 |
| 3 | 978-4567890123 | The Enigmatic Paws: Mysteries of Meowville | Maximilian Thorne | English | 288 | Cats | 17.99 |
| 4 | 978-5678901234 | Cats in Wonderland | Isadora Harrington | English | 224 | Cats | 16.99 |

In [35]:

```
# Question 1

df['author'].value_counts()
```

Out[35]:

| | count |
|----------------------------|-------|
| author | |
| Penelope Wainwright | 4 |
| Jasper Sterling | 2 |
| Benjamin Barkley | 2 |
| Maximilian Thorne | 1 |
| Celeste Nightshade | 1 |
| Isadora Harrington | 1 |
| Seraphina Montague | 1 |
| Sophie Shepherd | 1 |
| Oliver Obedience | 1 |
| Ruby Ruffington | 1 |

dtype: int64

In [38]:

```
# Question 2

df['topic'].value_counts()
```

Out[38]:

| | count |
|-------------|-------|
| topic | |
| Cats | 10 |
| Dogs | 5 |

dtype: int64

In [40]:

```
# Question 3

av_top_price = df.groupby(['topic'], as_index=False).agg({'price' : 'mean'})
av_top_price
```

Out[40]:

| | topic | price |
|----------|-------|-------|
| 0 | Cats | 17.79 |
| 1 | Dogs | 26.59 |

In [41]:

```
# Question 4
```

```
av_top_page = df.groupby(['topic'], as_index=False).agg({'pages' : 'mean'})  
av_top_page
```

Out[41]:

| | topic | pages |
|---|-------|-------|
| 0 | Cats | 238.4 |
| 1 | Dogs | 256.0 |