12/29/24, 3:21 PM graphs.py

~\OneDrive\Documents\graphs.py

```
1 import pandas as pd
2 import matplotlib.pyplot as plt
3 df = pd.read csv('books data.csv')
4 df['Price'] = df['Price'].replace('f', '', regex=True).astype(float)
5 price_ranges = ['<=20', '>20 & <=40', '>40 & <=60', '>60']
   counts = [0, 0, 0, 0]
6
7
   for price in df['Price']:
        if price <= 20:</pre>
8
9
            counts[0] += 1
       elif 20 < price <= 25:</pre>
10
11
            counts[1] += 1
        elif 26 < price <= 35:
12
13
            counts[2] += 1
14
        else:
15
            counts[3] += 1
   plt.figure(figsize=(6, 6))
16
    plt.bar(price_ranges, counts, color=['blue', 'green', 'orange', 'red'], edgecolor='black')
17
   plt.title('Books Distribution by Price Range', fontsize=16)
18
19
   plt.xlabel('Price Range (f)', fontsize=12)
20
   plt.ylabel('Number of Books', fontsize=12)
21
   plt.xticks(fontsize=10)
   plt.yticks(fontsize=10)
22
23
   plt.tight_layout()
   plt.show()
24
25
   plt.figure(figsize=(7, 6))
   plt.pie(counts, labels=price_ranges, autopct='%1.1f%%', startangle=140, colors=['grey',
26
    'lightgreen', 'lightblue', 'lightpink'])
    plt.title('Books Price Range Distribution', fontsize=16)
27
   plt.tight layout()
28
29
   plt.show()
30
```