In [1]:
```
%matplotlib inline
import pandas as pd
```

In [2]:
```
booksales = pd.read_csv('C:\\Users\\sujoydutta\\Downloads\\booksales.csv')
booksales
```

Out[2]:

	Book title	Number sold	Sales price	Royalty paid
0	The Bricklayer's Bible	8	2.99	0.55
1	Swimrand	2	1.99	0.35
2	Pining For The Fisheries of Yore	28	2.99	0.55
3	The Duck Goes Here	34	2.99	0.55
4	The Tower Commission Report	4	11.50	4.25

In [3]:
```
Q4sales = pd.read_csv('C:\\Users\\sujoydutta\\Downloads\\Q4salesreport.csv')
Q4sales
```

Out[3]:

	Title	Units sold	List price	Currency	Royalty FE	Royalty INR
0	Pining for the Fisheries of Yore	80	3.50	USD	14.98	1258.32
1	Swimrand	1	2.99	USD	0.14	11.76
2	The Bricklayer's Bible	17	3.50	USD	5.15	432.60
3	The Duck Goes Here	34	2.99	USD	5.78	485.52
4	The Tower Commission Report	4	9.50	USD	6.20	520.80
5	Pining for the Fisheries of Yore	47	2.99	UK	11.98	1281.86
6	The Bricklayer's Bible	17	2.99	UK	3.50	374.50
7	The Tower Commission Report	4	6.50	UK	4.80	513.60
8	Swimrand	8	1.99	EUR	0.88	80.96
9	The Duck Goes Here	12	1.99	EUR	1.50	138.00

Challenge: first combine these sales together into a single dataframe, then compute how much money consumers spent on each book in each currency.

In [7]:
```
data = pd.merge(booksales, Q4sales, left_on='Book title', right_on='Title', how='inner')


data = data.drop(columns=['Title'])

data
```

Out[7]:

	Book title	Number sold	Sales price	Royalty paid	Units sold	List price	Currency	Royalty FE	Royalty INR
0	Swimrand	2	1.99	0.35	1	2.99	USD	0.14	11.76
1	Swimrand	2	1.99	0.35	8	1.99	EUR	0.88	80.96
2	The Duck Goes Here	34	2.99	0.55	34	2.99	USD	5.78	485.52
3	The Duck Goes Here	34	2.99	0.55	12	1.99	EUR	1.50	138.00

4	The Tower Commission Report	4	11.50	4.25	4	9.50	USD	6.20	520.80
5	The Tower Commission Report	4	11.50	4.25	4	6.50	UK	4.80	513.60

In [8]:
```
data['Total_Spent'] = data['Number sold'] * data['Sales price']
data
```

Out[8]:

	Book title	Number sold	Sales price	Royalty paid	Units sold	List price	Currency	Royalty FE	Royalty INR	Total_Spent
0	Swimrand	2	1.99	0.35	1	2.99	USD	0.14	11.76	3.98
1	Swimrand	2	1.99	0.35	8	1.99	EUR	0.88	80.96	3.98
2	The Duck Goes Here	34	2.99	0.55	34	2.99	USD	5.78	485.52	101.66
3	The Duck Goes Here	34	2.99	0.55	12	1.99	EUR	1.50	138.00	101.66
4	The Tower Commission Report	4	11.50	4.25	4	9.50	USD	6.20	520.80	46.00
5	The Tower Commission Report	4	11.50	4.25	4	6.50	UK	4.80	513.60	46.00

In [14]:
```
data.columns = data.columns.str.strip()
data.columns
```

Out[14]:
```
Index(['Book title', 'Number sold', 'Sales price', 'Royalty paid',
       'Units sold', 'List price', 'Currency', 'Royalty FE', 'Royalty INR',
       'Total_Spent'],
      dtype='object')
```

In [15]:
```
spending_by_book_currency = data.pivot_table(index='Book title', columns='Currency', val

print(spending_by_book_currency)
```

```
Currency                     EUR     UK     USD
Book title
Swimrand                    3.98    NaN    3.98
The Duck Goes Here        101.66    NaN  101.66
The Tower Commission Report    NaN  46.0   46.00
```