ecommerce-purchases-analysis

February 21, 2020

1 Ecommerce-purchase data analysis

[5]:
```
import numpy as np
import pandas as pd
```

[2]:
```
ecom=pd.read_csv("../input/Ecommerce Purchases")
```

[3]:
```
ecom.head()
```

[3]:
```
                                             Address      …       Purchase
Price
0  16629 Pace Camp Apt. 448\nAlexisborough, NE 77…      …
98.14
1  9374 Jasmine Spurs Suite 508\nSouth John, TN 8…      …
70.73
2                   Unit 0065 Box 5052\nDPO AP 27450      …
0.95
3              7780 Julia Fords\nNew Stacy, WA 45798      …
78.04
4  23012 Munoz Drive Suite 337\nNew Cynthia, TX 5…      …
77.82

[5 rows x 14 columns]
```

[ ]:
```

```

[3]:
```
#Check the Average Price
```

[5]:
```
ecom['Purchase Price'].mean()
```

[5]:
```
50.34730200000025
```

[6]:
```
#Check the Highest and Lowest purchased Price
```

[7]:
```
ecom['Purchase Price'].max()
```

[7]:
```
99.99
```

[8]:
```
ecom['Purchase Price'].min()
```

[8]:
```
0.0
```

[9]:
```
#How many people have English 'en' as their Language of choice on the website
```

[10]:
```
ecom[ecom['Language']=="en"]['Language'].count()
```

[10]:
```
1098
```

[11]:
```
#How many people have the job title of "Lawyer" ?
```

[12]:
```
len(ecom[ecom['Job']=='Lawyer'].index)
```

[12]:
```
30
```

[13]:
```
#How many people made the purchase during the AM and how many people made the␣
↪purchase during PM
```

[14]:
```
ecom['AM or PM'].value_counts()
```

[14]:
```
PM    5068
AM    4932
Name: AM or PM, dtype: int64
```

[15]:
```
# ** What are the 5 most common Job Titles? **
```

[16]:
```
ecom['Job'].value_counts().head(5)
```

[16]:
```
Interior and spatial designer        31
Lawyer                               30
Social researcher                    28
Designer, jewellery                  27
Research officer, political party    27
Name: Job, dtype: int64
```

[17]:
```
##** Someone made a purchase that came from Lot: "90 WT" , what was the␣
↪Purchase Price for this transaction? **
```

[18]:
```
ecom[ecom['Lot']=='90 WT']['Purchase Price']
```

[18]:
```
513    75.1
Name: Purchase Price, dtype: float64
```

[19]:
```
#What is the email of the person with the following Credit Card Number:␣
↪4926535242672853
```

[20]:
```
ecom[ecom['Credit Card']==4926535242672853]['Email']
```

[20]:
```
1234    bondellen@williams-garza.com
Name: Email, dtype: object
```

[21]:
```
#How many people have American Express as their Credit Card Provider *and made␣
↪a purchase above $95 ?
```

[22]:
```
len(ecom[(ecom['CC Provider']=='American Express')&(ecom["Purchase Price"]>95)].
↪index)
```

[22]:
```
39
```

[23]:
```
#How many people have a credit card that expires in 2025?
```

[24]:
```
len(ecom[ecom['CC Exp Date'].apply(lambda exp:exp[3:]=='25')].index)
```

[24]:
```
1033
```

[25]:
```
#What are the top 5 most popular email providers/hosts (e.g. gmail.com, yahoo.
↪com, etc...)
```

[26]:
```
ecom['Email'].apply(lambda email:email.split('@')[1]).value_counts().head(5)
```

[26]:
```
hotmail.com     1638
yahoo.com       1616
gmail.com       1605
smith.com         42
williams.com      37
Name: Email, dtype: int64
```

[27]:
```

```