

```
In [6]: import pandas as pd
import numpy as np
```

```
In [7]: ## Read csv file
dp=pd.read_csv("ecommerce purchases.csv")
dp
```

Out[7]:

	Address	Lot	AM or PM	Browser Info	Company	Credit Card	CC Exp Date	Se
0	16629 Pace Camp Apt. 448\nAlexisborough, NE 77...	46 in	PM	Opera/9.56.(X11; Linux x86_64; sl- SI) Presto/2...	Martinez- Herman	6011929061123406	02/20	
1	9374 Jasmine Spurs Suite 508\nSouth John, TN 8...	28 rn	PM	Opera/8.93. (Windows 98; Win 9x 4.90; en-US) Pr...	Fletcher, Richards and Whitaker	3337758169645356	11/18	
2	Unit 0065 Box 5052\nDPO AP 27450	94 vE	PM	Mozilla/5.0 (compatible; MSIE 9.0; Windows NT ...	Simpson, Williams and Pham	675957666125	08/19	
3	7780 Julia Fords\nNew Stacy, WA 45798	36 vm	PM	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_0 ...	Williams, Marshall and Buchanan	6011578504430710	02/24	
4	23012 Munoz Drive Suite 337\nNew Cynthia, TX 5...	20 IE	AM	Opera/9.58.(X11; Linux x86_64; it- IT) Presto/2...	Brown, Watson and Andrews	6011456623207998	10/25	
...
9995	966 Castaneda Locks\nWest Juliafurt, CO 96415	92 XI	PM	Mozilla/5.0 (Windows NT 5.1) AppleWebKit/5352 ...	Randall- Sloan	342945015358701	03/22	
9996	832 Curtis Dam Suite 785\nNorth Edwardburgh, T...	41 JY	AM	Mozilla/5.0 (compatible; MSIE 9.0; Windows NT ...	Hale, Collins and Wilson	210033169205009	07/25	
9997	Unit 4434 Box 6343\nDPO AE 28026-0283	74 Zh	AM	Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_7...	Anderson Ltd	6011539787356311	05/21	
9998	0096 English Rest\nRoystad, IA 12457	74 cL	PM	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_8;...	Cook Inc	180003348082930	11/17	
9999	40674 Barrett Stravenue\nGrimesville, WI 79682	64 Hr	AM	Mozilla/5.0 (X11; Linux i686; rv:1.9.5.20) Gec...	Greene Inc	4139972901927273	02/19	

10000 rows × 14 columns

```
In [8]: ## Null values  
dp.isnull().sum()
```

```
Out[8]: Address          0  
        Lot              0  
        AM or PM         0  
        Browser Info     0  
        Company          0  
        Credit Card      0  
        CC Exp Date      0  
        CC Security Code 0  
        CC Provider      0  
        Email            0  
        Job              0  
        IP Address       0  
        Language         0  
        Purchase Price   0  
        dtype: int64
```

```
In [9]: ## average of purchase price  
dp["Purchase Price"].mean()
```

```
Out[9]: 50.34730200000025
```

```
In [10]: ## Min of purchase price  
dp["Purchase Price"].min()
```

```
Out[10]: 0.0
```

```
In [11]: ## max of purchase price  
dp["Purchase Price"].max()
```

```
Out[11]: 99.99
```

```
In [12]: ##count of english  
dp[dp["Language"]=="en"].count()
```

```
Out[12]: Address          1098  
        Lot              1098  
        AM or PM         1098  
        Browser Info     1098  
        Company          1098  
        Credit Card      1098  
        CC Exp Date      1098  
        CC Security Code 1098  
        CC Provider      1098  
        Email            1098  
        Job              1098  
        IP Address       1098  
        Language         1098  
        Purchase Price   1098  
        dtype: int64
```

```
In [13]: ## count of job titl lawyers  
dp[dp["Job"]=="Lawyer"].count()
```

```
Out[13]: Address          30  
        Lot              30  
        AM or PM         30  
        Browser Info     30  
        Company          30  
        Credit Card       30  
        CC Exp Date       30  
        CC Security Code  30  
        CC Provider       30  
        Email            30  
        Job              30  
        IP Address        30  
        Language          30  
        Purchase Price    30  
        dtype: int64
```

```
In [14]: ## count of am workers  
dp[dp["AM or PM"]=="AM"].count()
```

```
Out[14]: Address          4932  
        Lot              4932  
        AM or PM         4932  
        Browser Info     4932  
        Company          4932  
        Credit Card       4932  
        CC Exp Date       4932  
        CC Security Code  4932  
        CC Provider       4932  
        Email            4932  
        Job              4932  
        IP Address        4932  
        Language          4932  
        Purchase Price    4932  
        dtype: int64
```

```
In [29]: #count of pm workers
dp[dp["AM or PM"]=="PM"].count()
```

```
Out[29]: Address          5068
Lot          5068
AM or PM     5068
Browser Info 5068
Company       5068
Credit Card  5068
CC Exp Date   5068
CC Security Code 5068
CC Provider   5068
Email         5068
Job           5068
IP Address    5068
Language      5068
Purchase Price 5068
dtype: int64
```

```
In [31]: ## most common job titles
dp["Job"].value_counts()
```

```
Out[31]: Interior and spatial designer    31
Lawyer                                   30
Social researcher                        28
Purchasing manager                      27
Designer, jewellery                     27
..
Prison officer                          7
Editor, film/video                       6
Actuary                                  6
Information systems manager              5
Investment analyst                       5
Name: Job, Length: 623, dtype: int64
```

```
In [54]: # get the email by credit card number
dp[dp["Credit Card"]=="6011350184276270"]["Email"]
```

```
Out[54]: 18    hannah63@yahoo.com
Name: Email, dtype: object
```

```
In [87]: ##CC= american express
dp[(dp["CC Provider"]== "American Express")&(dp["Purchase Price"] >95)].count()
```

```
Out[87]: Address          39
         Lot              39
         AM or PM         39
         Browser Info     39
         Company          39
         Credit Card      39
         CC Exp Date      39
         CC Security Code 39
         CC Provider      39
         Email            39
         Job              39
         IP Address       39
         Language         39
         Purchase Price   39
         dtype: int64
```

```
In [15]: ##CC=master card
dp[(dp["CC Provider"]== "Mastercard")&(dp["Purchase Price"]>90)].count()
```

```
Out[15]: Address          84
         Lot              84
         AM or PM         84
         Browser Info     84
         Company          84
         Credit Card      84
         CC Exp Date      84
         CC Security Code 84
         CC Provider      84
         Email            84
         Job              84
         IP Address       84
         Language         84
         Purchase Price   84
         dtype: int64
```

```
In [ ]:
```