### **Ecommerce Purchases Project**

```
In [58]: import pandas as pd
In [59]: data = pd.read_csv('Ecommerce Purchases')
data
```

Out[59]:

	Address	Lot	AM or PM	Browser Info	Company	Credit Card	CC Exp Date	Sec
(	16629 Pace Camp Apt. 448\nAlexisborough, NE 77	46 in	PM	Opera/9.56.(X11; Linux x86_64; sI-SI) Presto/2	Martinez- Herman	6011929061123406	02/20	
	9374 Jasmine Spurs 1 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	
:	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	
:	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	
	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	
•								
999	966 Castaneda Locks\nWest Juliafurt, CO 96415	92 XI	PM	Mozilla/5.0 (Windows NT 5.1) AppleWebKit/5352 	Randall- Sloan	342945015358701	03/22	
999	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	
999	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 9 Stravenue\nGrimesville, WI 79682	64 Hr	AM	Mozilla/5.0 (X11; Linux i686; rv:1.9.5.20) Gec	Greene Inc	4139972901927273	02/19	
1000	0 rows × 14 columns							

#### 1. Display Top 10 Rows of The Dataset

In [60]: data.head(10)

Out[60]:

0         16629 Pace Camp Apt. 448\nAlexisborough, NE 77         46 in PM         Opera/9.56.(X11; linux x86_64; sl-S) Presto/2         Martinez-Herman         6011929061123406         02/20           1         9374 Jasmine Spurs Suite 508\nSouth John, TN 8         28 m PM         Opera/8.93 (Windows 98; Wing 9x 4.90; en-US) Pr (Windows 98; Wing 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 90; Windows NT and Pham and Buchanan and Buchanan and Buchanan)         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 and Buchanan         6011578504430710         02/24           4         23012 Munoz Drive Suite 337\nNew Cynthia, TX 5         20 m Mozilla/5.0 (Macintosh; Ut PPC Mac OS X 10_8.5         Brown, Matson Andrews         Matshall and Buchanan and Andrews         6011456623207998         10/25           5         7502 Powell Mission Apt. 768\nTravisland, VA 3         21 pM Mozilla/5.0 (Macintosh; Ut PPC Mac OS X 10_8.5         Mozilla/5.0 (Macintosh; Ut PPC Mac OS X 10_8.5         Silva-Andreson         30246185196287         07/25           6         Q3971 Conway 200 Compatible; MSIE 366\nCastroberg, WV 24         Mozilla/5.0 (X11; Univ		Address	Lot	AM or PM	Browser Info	Company	Credit Card	CC Exp Date	S
1 9374 Jasmine Spurs Suite 508\nSouth John, TN 8 rn PM (Windows 98; Win 9x 4.90; en-US) Pr Richards and Whitaker  2 Unit 0065 Box 5052\nDPO AP 27450 vE PM (Compatible; MSIE 9.0; Windows NT and Pham Stacy, WA 45798 vm PM (Macintosh; Intel Mac OS X 10_8_0 Williams, Marshall and Buchanan Buchanan Buchanan Presto/2 AM (Macintosh; Ur) Presto/2 Brown, Watson and Andrews  5 7502 Powell Mission Apt. 768\nTravisland, VA 3 XT PM (Macintosh; Ur) PPC Mac OS X 10_8_0 Silva-Anderson Apt. AZ 75107 Xt AZ 75107 Yz 260 Rachel Plains Suite 366\nCastroberg, WV 24 ppG PM Michelle, ME 28650 JN PM Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_8.0 Mozilla/5.0 (Compatible; MSIE 7.0; Windows NT Silva-Anderson and Sons Apt. 21 (Linux i686) AppleWebKit/5350 Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_8.0 Mozilla/5.0 (Compatible; MSIE 7.0; Windows NT Silva-Anderson and Sons Apt. 221 (Macintosh; U; Intel Mac OS X 10_8.0 Mozilla/5.0 (Compatible; MSIE 7.0; Windows NT Silva-Anderson and Sons Sons Apt. 245 (Macintosh; U; Intel Mac OS X 10_8.0 Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_8.0 Mo	0	448\nAlexisborough, NE		PM	Linux x86_64; sl-Sl)		6011929061123406	02/20	
Mozilla/5.0   Macintosh; Intel Mac OS X 10_8_0   Mozilla/5.0   Macintosh; U; PPC Mac OS X 10_8_0   Mozilla/5.0   Mozilla/5	1	•		PM	(Windows 98; Win	Richards and	3337758169645356	11/18	
3         7780 Julia Fords\nNew Stacy, WA 45798         36 vm         PM         Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_0         Marshall and Buchanan         6011578504430710         02/24           4         23012 Munoz Drive Suite 337\nNew Cynthia, TX 5         20 IE         AM         Opera/9.58.(X11; Dinux x86_64; it-IT) Presto/2         Brown, Watson and Andrews         6011456623207998         10/25           5         7502 Powell Mission Apt. 768\nTravisland, VA 3         21 XT         PM         Mozilla/5.0 (Macintosh; U; PPC Mac OS X 10_8_5         Silva-Anderson         30246185196287         07/25           6         Causeway\nAndersonburgh, AZ 75107         96 Xt         AM         Mozilla/5.0 (Compatible; MSIE 7.0; Windows NT         Gibson and Sons         6011398782655569         07/24           7         260 Rachel Plains Suite 366\nCastroberg, WV 24         96 pG         PM         Mozilla/5.0 (X11; Linux i686) AppleWebKit/5350         Marshall Collins         561252141909         06/25           8         2129 Dylan Burg\nNew Michelle, ME 28650         45 JN         PM         Mozilla/5.0 (X11; Mac OS X 10_7         Galloway and Sons         180041795790001         04/24           9         Extensions\nLake Tinafort, ID 88739         15 Ug         AM         Mozilla/5.0 (X11; Linux i686; px/19.720) Gec         Rivera, and and Andreson         Audication ship	2			PM	(compatible; MSIE	Williams	675957666125	08/19	
4       23012 Munoz Drive Suite 337\nNew Cynthia, TX 5       20 IE       AM       Univar x86_64; it-IT) Presto/2       Watson and Andrews       6011456623207998       10/25         5       7502 Powell Mission Apt. 768\nTravisland, VA 3       21 XT       PM       Mozilla/5.0 (Macintosh; U; PPC Mac OS X 10_8_5       Silva-Anderson       30246185196287       07/25         6       Causeway\nAndersonburgh, AZ 75107       96 Xt       AM       Mozilla/5.0 (compatible; MSIE 7.0; Windows NT       Gibson and Sons       6011398782655569       07/24         7       260 Rachel Plains Suite 366\nCastroberg, WV 24       96 pG       PM       Mozilla/5.0 (X11; Linux i686) AppleWebKit/5350       Marshall-Collins       561252141909       06/25         8       2129 Dylan Burg\nNew Michelle, ME 28650       45 JN       PM       Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_7       Galloway and Sons       180041795790001       04/24         9       Extensions\nLake Tinafort, ID 88739       15 Ug       AM       Mozilla/5.0 (X11; Linux i686; px 19.720) Ger       Rivera, Buchanan and Anderson       4396283918371       01/17	3	•		PM	(Macintosh; Intel	Marshall and	6011578504430710	02/24	
5         7502 Powell Mission Apt. 768\nTravisland, VA 3         21 NT         PM         (Macintosh; U; PPC Mac OS X 10_8_5         Silva-Anderson         30246185196287         07/25           6         Causeway\nAndersonburgh, AZ 75107         96 Xt         AM         Mozilla/5.0 (compatible; MSIE 7.0; Windows NT         Gibson and Sons         6011398782655569         07/24           7         260 Rachel Plains Suite 366\nCastroberg, WV 24         96 pG         PM         Mozilla/5.0 (X11; Linux i686) AppleWebKit/5350         Marshall Collins         561252141909         06/25           8         2129 Dylan Burg\nNew Michelle, ME 28650         45 JN         PM         Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_7         Galloway and Sons         180041795790001         04/24           9         Extensions\nLake Tinafort, ID 88739         Mozilla/5.0 (X11; Linux i686; N:11; Linux i686; N:19 7.20) Gec         Rivera, Buchanan and and         4396283918371         01/17	4			AM	Linux x86_64; it-IT)	Watson and	6011456623207998	10/25	
6 Causeway\nAndersonburgh, AZ 75107  7 260 Rachel Plains Suite 366\nCastroberg, WV 24  96 Yt 7.0; Windows NT  Mozilla/5.0 (X11; Linux i686) AppleWebKit/5350  8 2129 Dylan Burg\nNew Michelle, ME 28650  9 PM Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_7  Mozilla/5.0 Gibson and Sons 6011398782655569 07/24  Marshall-Collins Collins  Mozilla/5.0 Galloway and Sons 180041795790001 04/24  Mozilla/5.0 (X11; Linux i686; rv:19.7.20) Gec 15 PM Rivera, Buchanan and 4396283918371 01/17	5	•		PM	(Macintosh; U; PPC		30246185196287	07/25	
7 260 Rachel Plains Suite 96 pG PM Linux i686) AppleWebKit/5350 S61252141909 06/25  8 2129 Dylan Burg\nNew Michelle, ME 28650 JN PM (Macintosh; U; Intel Mac OS X 10_7 Galloway and Sons Sons Sons Sons Sons Sons Sons Sons	6	Causeway\nAndersonburgh,		AM	(compatible; MSIE		6011398782655569	07/24	
8 2129 Dylan Burg\nNew 45 JN PM (Macintosh; U; Intel Mac OS X 10_7 Galloway and Sons 180041795790001 04/24    9 Extensions\nLake Tinafort, ID 88739	7			PM	Linux i686)		561252141909	06/25	
9 Extensions\nLake Tinafort, Ug AM Linux i686; Buchanan 4396283918371 01/17	8	, ,		PM	(Macintosh; U; Intel	-	180041795790001	04/24	
	9	Extensions\nLake Tinafort,		AM	Linux i686;	Buchanan and	4396283918371	01/17	

#### 2. Check Last 10 Rows of The Dataset

In [61]: data.tail(10)

Out[61]:

9990         T5731 Molly Springs\nWest Janielle, VT 96934- 5102         93 by Danielle, VT 96934- 5102         PM         Mozilla/5.0 (Macintosh, Intel Mac OS X 10.7.4).         Pace, Vazquez and Richards         869968197049750         04/24           9991         8498\nAPO AP 60327- 0346         50 dA         AM         Compatible; MSIE 8.0; Windows NT 10.7.4).         Snyder Inc.         4221582137197481         02/24           9992         885 Allen Mountains Apt. 230\nWallhaven, LA 16995         40 of Mac OS X 10.6.5). A         Mozilla/5.0 (Macintosh; PDC Mac OS X 10.6.5). A         Wells Ltd         4664825258997302         10/20           9993         7555 Larson Locks Suite 229\nEllisburgh, MA 34         72 pM Mac OS X 10.6.5). A         Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.8         Colon and Sons         30025560104631         10/25           9994         Hollow\nLake Louis, WY 56410-7837         93 pm         PM Linux 88.64; sl-Sl) Presto/2         Ritter-Smith         3112186784121077         01/25           9995         832 Curtis Dam Suite 785\nNorth Edwardburgh, T         41 AM (Compatible; MSIE 9.0; Windows NT 5.1) AppleWebKit/5352         Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.7         Anderson Locks Sand Wilson         210033169205009         07/25           9997         6343\nDPO AE 28026- 0283         74 AM (Lock Mac OS X 10.8) Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.8         Anderson (Macintosh; U) In		Address	Lot	AM or PM	Browser Info	Company	Credit Card	CC Exp Date	Sec
PSC 8165, BOX 500 dA	999	Springs\nWest Danielle, VT 96934-		PM	(Macintosh; Intel Mac OS X	Vazquez and	869968197049750	04/24	
9992         Apt. 230\nWallhaven, LA 16995         40 vH         PM         (Macintosh; PPC Mac OS X 10_6_5)         Wells Ltd         4664825258997302         10/20           9993         7555 Larson Locks Suite 229\nEllisburgh, MA 34         72 jg         PM         Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_8         Colon and Sons 10/25           9994         6276 Rojas Hollow\nLake Louis, WY 56410-7837         93 Ex         PM         Opera/9.68.(X11; Presto/2         Ritter-Smith Siloan         3112186784121077         01/25           9995         Joseph Locks\nWest Juliafurt, CO 96415         92 XI         Mozilla/5.0 (Windows NT 5.1) AppleWebKit/5352         Randall-Sloan Siloan Si	999	1 8498\nAPO AP 60327-		AM	(compatible; MSIE	•	4221582137197481	02/24	
9993         Suite 229\nEllisburgh, MA 34         72 jg         PM         (Macintosh; U; Intel Mac OS X 10_8         Colon and Sons         30025560104631         10/25           9994         Hollow\nLake Louis, WY 56410-7837         93 Ex         PM         Opera/9.68.(X11; Dinux x86_64; sl-SI) Presto/2         Ritter-Smith         3112186784121077         01/25           9995         Joseph Locks\nWest Juliafurt, CO 96415         92 XI         Mozilla/5.0 (Windows NT 5.1) AppleWebKit/5352         Randall-Sloan Sloan Slo	999	2 Apt. 230\nWallhaven,		PM	(Macintosh; PPC Mac OS X 10_6_5)	Wells Ltd	4664825258997302	10/20	
9994 Hollow\nLake Louis, WY 56410-7837 Ex PM Linux x86_64; sl-Sl) Presto/2  9985 PM Linux x86_64; sl-Sl) Presto/2  9995 Presto/2  Mozilla/5.0 (Windows NT 5.1) AppleWebKit/5352  9996 PM Amozilla/5.0 (Windows NT 5.1) AppleWebKit/5352  9996 PM Amozilla/5.0 (Windows NT 5.1) AppleWebKit/5352  9997 PM Amozilla/5.0 (compatible; MSIE 9.0; Windows NT  9997 PM Amozilla/5.0 (compatible; MSIE 9.0; Windows NT  9997 PM Amozilla/5.0 (Macintosh; U; Intel Mac OS X 10_7  9998 PM Amozilla/5.0 (Macintosh; Intel Mac OS X 10_8.8;  9998 PM Linux x86_64; sl-Sl) Ritter-Smith 3112186784121077 01/25  9107 Presto/2  9108 PM Amozilla/5.0 (Macintosh; U; Intel Mac OS X 10_8.8;  9998 PM Linux x86_64; sl-Sl) Restored Site of Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  9998 PM Linux x86_64; sl-Sl) Restored Site of Smith 3112186784121077 01/25  PM Amozilla/5.0 (Macintosh; Intel Mac OS X 10_8.8;  PM Amozilla/5.0 (Macintosh; Intel Mac OS X 10_8.8;  PM Amozilla/5.0 (Macintosh; Intel Mac OS X 10_8.8;	999	Suite 229\nEllisburgh,		PM	(Macintosh; U; Intel Mac OS X		30025560104631	10/25	
9995 Locks\nWest Juliafurt, CO 96415 XI PM (Windows NT 5.1) AppleWebKit/5352 Sloan S	999	4 Hollow\nLake Louis,		PM	Linux x86_64; sl-Sl)		3112186784121077	01/25	
9996 785\nNorth Edwardburgh, T 41  9097 Windows NT Sile 9.0; Windows	999	Locks\nWest Juliafurt,		PM	(Windows NT 5.1)		342945015358701	03/22	
9997 6343\nDPO AE 28026- 0283	999	6 785\nNorth		AM	(compatible; MSIE	Collins and	210033169205009	07/25	
9998 Rest\nRoystad, IA 12457 PM (Macintosh; Intel Mac OS X 10_8_8; Cook Inc 180003348082930 11/17	999	7 6343\nDPO AE 28026-		AM	(Macintosh; U; Intel Mac OS X	_	6011539787356311	05/21	
40674 Barrett Mozilla/5.0 (X11;	999	Rest\nRoystad, IA		PM	(Macintosh; Intel Mac OS X	Cook Inc	180003348082930	11/17	
9999 Stravenue\nGrimesville, Hr	999	9 Stravenue\nGrimesville,	64 Hr	AM	Linux i686;	Greene Inc	4139972901927273	02/19	

#### 3. Check Datatype of Each Column

In [62]: data.dtypes

```
object
         Address
Out[62]:
         Lot
                               object
         AM or PM
                               object
         Browser Info
                               object
                               object
         Company
         Credit Card
                                int64
         CC Exp Date
                               object
         CC Security Code
                               int64
         CC Provider
                               object
         Email
                               object
         Job
                               object
         IP Address
                               object
                               object
         Language
         Purchase Price
                              float64
         dtype: object
```

#### 4. Check Null Values In the Dataset

```
data.isnull().sum()
In [63]:
                                 0
          Address
Out[63]:
                                 0
          Lot
          \mathsf{AM} or \mathsf{PM}
                                 0
          Browser Info
          Company
                                 0
          Credit Card
          CC Exp Date
          CC Security Code
                                0
          CC Provider
                                 0
          Email
                                 0
          Job
                                 0
          IP Address
          Language
          Purchase Price
                                 0
          dtype: int64
```

## 5. How many Rows And Columns Are In Our Dataset?

```
In [64]: len(data.columns)
Out[64]: 
14

In [65]: len(data)
Out[65]: 
10000

In [66]: data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10000 entries, 0 to 9999
Data columns (total 14 columns):
     Column
                        Non-Null Count Dtype
---
    -----
                        -----
     Address
0
                      10000 non-null object
                      10000 non-null object
 1
   Lot
2 AM or PM 10000 non-null object
3 Browser Info 10000 non-null object
4 Company 10000 non-null object
4 Company
                      10000 non-null object
5 Credit Card6 CC Exp Date
                      10000 non-null int64
                      10000 non-null object
    CC Security Code 10000 non-null int64
 7
 8 CC Provider 10000 non-null object
9 Email
                      10000 non-null object
 10 Job
                      10000 non-null object
11 IP Address 10000 non-null object
12 Language 10000 non-null object
13 Purchase Price 10000 non-null float64
dtypes: float64(1), int64(2), object(11)
memory usage: 1.1+ MB
```

#### 6. Highest And Lowest Purchase Prices

#### 7. Average Purchase Price

```
In [70]: data['Purchase Price'].mean()
Out[70]: 50.347302
```

## 8. How Many People Have French 'fr' As Their Language?

```
In [71]: len(data[data['Language']=='fr'])
Out[71]: 
In [72]: data[data['Language']=='fr'].count()
```

```
1097
         Address
Out[72]:
         Lot
                             1097
         AM or PM
                             1097
         Browser Info
                             1097
         Company
                             1097
         Credit Card
                             1097
         CC Exp Date
                             1097
         CC Security Code
                             1097
         CC Provider
                             1097
         Email
                             1097
         Joh
                             1097
         IP Address
                             1097
                             1097
         Language
         Purchase Price
                             1097
         dtype: int64
```

#### 9. Job Title Contains Engineer

## 10. Find Email of The Person With The Following IP address: 132.207.160.22

```
In [75]: data[data['IP Address']=='132.207.160.22']['Email']
Out[75]: 2    amymiller@morales-harrison.com
Name: Email, dtype: object
```

# 11. How Many People Have Mastercard As Their Credit Card Provider And Made A Purchase Above 50?

```
405
         Address
Out[78]:
                              405
          Lot
         AM or PM
                              405
         Browser Info
                              405
         Company
                              405
         Credit Card
                              405
         CC Exp Date
                              405
         CC Security Code
         CC Provider
                              405
         Email
                              405
          Job
                              405
         IP Address
                              405
                              405
         Language
         Purchase Price
                              405
         dtype: int64
```

## 12. Find Email of The Person With The Following Credit Card Number: 4664825258997302

## 13. How Many People Purchase During The AM and How Many People Purchase During PM?

## 14. How many People Have A Credit Card That Expires In 2020?

```
In [82]:
         data['CC Exp Date']
                  02/20
Out[82]:
                  11/18
                  08/19
          3
                  02/24
                  10/25
                  . . .
         9995
                  03/22
          9996
                  07/25
         9997
                  05/21
          9998
                  11/17
                  02/19
         Name: CC Exp Date, Length: 10000, dtype: object
In [87]:
          def fun():
              count=0
              for date in data['CC Exp Date']:
```

```
if date.split('/')[1]=='20':
            count=count+1
    print(count)
fun()
```

In [88]:

988

#### **Another Way**

```
len(data[data['CC Exp Date'].apply(lambda x:x[3:]=='20')])
In [91]:
Out[91]:
```

#### 15. Top 5 Most Popular Email providers (e.g. gmail.com, yahoo.com, etc..)

```
In [94]:
          list1=[]
          for email in data['Email']:
               list1.append(email.split('@')[1])
          data['temp']=list1
In [95]:
In [96]:
          data.head(1)
                                                                                    CC
                                                                                             CC
Out[96]:
                                     AM
                                             Browser
                       Address Lot
                                                      Company
                                                                      Credit Card
                                                                                        Security
                                      or
                                                                                   Exp
                                                Info
                                                                                                  Provid
                                     PM
                                                                                   Date
                                                                                           Code
                                          Opera/9.56.
                16629 Pace Camp
                                           (X11; Linux
                           Apt.
                                 46
                                                      Martinez-
                                                                                                    JCB
                                           x86 64; sl-
                                                                6011929061123406 02/20
                                                                                             900
             448\nAlexisborough,
                                                       Herman
                                                                                                     d
                                 in
                                                  SI)
                        NE 77...
                                           Presto/2...
          data['temp'].value_counts().head()
In [98]:
          hotmail.com
                            1638
Out[98]:
                            1616
          yahoo.com
          gmail.com
                            1605
                              42
          smith.com
          williams.com
                              37
          Name: temp, dtype: int64
          Another Way
```

```
data['Email'].apply(lambda x:x.split('@')[1]).value_counts().head()
In [99]:
         hotmail.com
                          1638
Out[99]:
                          1616
         yahoo.com
         gmail.com
                          1605
         smith.com
                            42
         williams.com
                            37
         Name: Email, dtype: int64
```