

```
In [6]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

```
In [7]: dataset = pd.read_csv("chipotle_stores.csv")
```

```
In [8]: print(dataset)
```

	state	location \
0	Alabama	Auburn
1	Alabama	Birmingham
2	Alabama	Birmingham
3	Alabama	Birmingham
4	Alabama	Cullman
...
2624	Wisconsin	Pleasant Prairie
2625	Wisconsin	Wauwatosa
2626	North Dakota	Fargo
2627	North Dakota	Fargo
2628	Wyoming	Cheyenne

	address	latitude	longitude
0	346 W Magnolia Ave Auburn, AL 36832 US	32.606813	-85.487328
1	300 20th St S Birmingham, AL 35233 US	33.509721	-86.802756
2	3220 Morrow Rd Birmingham, AL 35235 US	33.595581	-86.647437
3	4719 Highway 280 Birmingham, AL 35242 US	33.422582	-86.698279
4	1821 Cherokee Ave SW Cullman, AL 35055 US	34.154134	-86.841220
...
2624	9370 76th St # B Pleasant Prairie, WI 53158 US	42.565892	-87.921048
2625	2711 N Mayfair Rd Ste A Wauwatosa, WI 53222 US	43.067723	-88.048222
2626	1204 19th Ave N Fargo, ND 58102 US	46.904247	-96.796618
2627	1680 45th St S Fargo, ND 58103 US	46.855337	-96.861416
2628	1508 Dell Range Blvd Cheyenne, WY 82009 US	41.160718	-104.805699

[2629 rows x 5 columns]

```
In [9]: dataset.head()
```

Out[9]:

	state	location	address	latitude	longitude
0	Alabama	Auburn	346 W Magnolia Ave Auburn, AL 36832 US	32.606813	-85.487328
1	Alabama	Birmingham	300 20th St S Birmingham, AL 35233 US	33.509721	-86.802756
2	Alabama	Birmingham	3220 Morrow Rd Birmingham, AL 35235 US	33.595581	-86.647437
3	Alabama	Birmingham	4719 Highway 280 Birmingham, AL 35242 US	33.422582	-86.698279
4	Alabama	Cullman	1821 Cherokee Ave SW Cullman, AL 35055 US	34.154134	-86.841220

In [10]: `dataset.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2629 entries, 0 to 2628
Data columns (total 5 columns):
 #   Column      Non-Null Count  Dtype
---  -
 0   state       2629 non-null   object
 1   location    2629 non-null   object
 2   address     2629 non-null   object
 3   latitude    2629 non-null   float64
 4   longitude   2629 non-null   float64
dtypes: float64(2), object(3)
memory usage: 102.8+ KB
```

In [12]: `dataset.describe()`

Out[12]:

	latitude	longitude
count	2629.000000	2629.000000
mean	37.515979	-92.490287
std	4.749089	16.578616
min	25.479009	-124.183611
25%	33.876535	-105.095673
50%	38.898082	-87.180851
75%	40.813125	-78.879958
max	48.785206	-68.753750

In [11]: `data.describe()`

```
-----
NameError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_7456\3175101911.py in <module>
----> 1 data.describe()
```

NameError: name 'data' is not defined

```
In [13]: dataset.isnull()
```

Out[13]:

	state	location	address	latitude	longitude
0	False	False	False	False	False
1	False	False	False	False	False
2	False	False	False	False	False
3	False	False	False	False	False
4	False	False	False	False	False
...
2624	False	False	False	False	False
2625	False	False	False	False	False
2626	False	False	False	False	False
2627	False	False	False	False	False
2628	False	False	False	False	False

2629 rows × 5 columns

```
In [14]: dataset.notnull()
```

Out[14]:

	state	location	address	latitude	longitude
0	True	True	True	True	True
1	True	True	True	True	True
2	True	True	True	True	True
3	True	True	True	True	True
4	True	True	True	True	True
...
2624	True	True	True	True	True
2625	True	True	True	True	True
2626	True	True	True	True	True
2627	True	True	True	True	True
2628	True	True	True	True	True

2629 rows × 5 columns

In [15]: dataset.dtypes

```
Out[15]: state          object
location      object
address       object
latitude      float64
longitude     float64
dtype: object
```

In [16]: dataset.dropna

```
Out[16]: <bound method DataFrame.dropna of              state          location \
0          Alabama          Auburn
1          Alabama      Birmingham
2          Alabama      Birmingham
3          Alabama      Birmingham
4          Alabama      Cullman
...          ...          ...
2624      Wisconsin  Pleasant Prairie
2625      Wisconsin      Wauwatosa
2626  North Dakota          Fargo
2627  North Dakota          Fargo
2628          Wyoming      Cheyenne

              address  latitude  longitude
0      346 W Magnolia Ave Auburn, AL 36832 US  32.606813  -85.487328
1      300 20th St S Birmingham, AL 35233 US  33.509721  -86.802756
2      3220 Morrow Rd Birmingham, AL 35235 US  33.595581  -86.647437
3      4719 Highway 280 Birmingham, AL 35242 US  33.422582  -86.698279
4      1821 Cherokee Ave SW Cullman, AL 35055 US  34.154134  -86.841220
...          ...          ...
2624  9370 76th St # B Pleasant Prairie, WI 53158 US  42.565892  -87.921048
2625  2711 N Mayfair Rd Ste A Wauwatosa, WI 53222 US  43.067723  -88.048222
2626          1204 19th Ave N Fargo, ND 58102 US  46.904247  -96.796618
2627          1680 45th St S Fargo, ND 58103 US  46.855337  -96.861416
2628      1508 Dell Range Blvd Cheyenne, WY 82009 US  41.160718  -104.805699

[2629 rows x 5 columns]>
```

In [17]: dataset.astype

```
Out[17]: <bound method NDFrame.astype of
0      Alabama      Auburn
1      Alabama      Birmingham
2      Alabama      Birmingham
3      Alabama      Birmingham
4      Alabama      Cullman
...      ...      ...
2624    Wisconsin Pleasant Prairie
2625    Wisconsin Wauwatosa
2626  North Dakota      Fargo
2627  North Dakota      Fargo
2628    Wyoming      Cheyenne

      address      latitude      longitude
0      346 W Magnolia Ave Auburn, AL 36832 US 32.606813 -85.487328
1      300 20th St S Birmingham, AL 35233 US 33.509721 -86.802756
2      3220 Morrow Rd Birmingham, AL 35235 US 33.595581 -86.647437
3      4719 Highway 280 Birmingham, AL 35242 US 33.422582 -86.698279
4      1821 Cherokee Ave SW Cullman, AL 35055 US 34.154134 -86.841220
...      ...      ...
2624  9370 76th St # B Pleasant Prairie, WI 53158 US 42.565892 -87.921048
2625  2711 N Mayfair Rd Ste A Wauwatosa, WI 53222 US 43.067723 -88.048222
2626      1204 19th Ave N Fargo, ND 58102 US 46.904247 -96.796618
2627      1680 45th St S Fargo, ND 58103 US 46.855337 -96.861416
2628    1508 Dell Range Blvd Cheyenne, WY 82009 US 41.160718 -104.805699

[2629 rows x 5 columns]>
```

In []: