

#Assignment 11

```
import pandas as pd
```

```
import numpy as np
```

```
df=pd.read_csv('Vehicles.csv')
```

```
df.head()
```

	id	url \
0	7222695916	https://prescott.craigslist.org/cto/d/prescott...
1	7218891961	https://fayar.craigslist.org/ctd/d/bentonville...
2	7221797935	https://keys.craigslist.org/cto/d/summerland-k...
3	7222270760	https://worcester.craigslist.org/cto/d/west-br...
4	7210384030	https://greensboro.craigslist.org/cto/d/trinit...

	region	region_url	price
year \			
0	prescott	https://prescott.craigslist.org	6000
NaN			
1	fayetteville	https://fayar.craigslist.org	11900
NaN			
2	florida keys	https://keys.craigslist.org	21000
NaN			
3	worcester / central MA	https://worcester.craigslist.org	1500
NaN			
4	greensboro	https://greensboro.craigslist.org	4900
NaN			

	manufacturer	model	condition	cylinders	...	size	type
paint_color \							
0	NaN	NaN	NaN	NaN	...	NaN	NaN
1	NaN	NaN	NaN	NaN	...	NaN	NaN
2	NaN	NaN	NaN	NaN	...	NaN	NaN
3	NaN	NaN	NaN	NaN	...	NaN	NaN
4	NaN	NaN	NaN	NaN	...	NaN	NaN

	image_url	description	county	state	lat	long	posting_date
0	NaN		NaN	az	NaN	NaN	NaN
1	NaN		NaN	ar	NaN	NaN	NaN
2	NaN		NaN	fl	NaN	NaN	NaN
3	NaN		NaN	ma	NaN	NaN	NaN
4	NaN		NaN	nc	NaN	NaN	NaN

```
[5 rows x 26 columns]
```

```
df.tail()
```

	id	url
region \		
1996	7308972392	https://dothan.craigslist.org/ctd/d/alachua-20...
dothan		
1997	7308971633	https://dothan.craigslist.org/ctd/d/alachua-20...
dothan		
1998	7308831024	https://dothan.craigslist.org/ctd/d/dothan-201...
dothan		
1999	7308801755	https://dothan.craigslist.org/ctd/d/alachua-20...
dothan		
2000	7308801682	https://dothan.craigslist.org/ctd/d/alachua-20...
dothan		

	region_url	price	year	manufacturer \
1996	https://dothan.craigslist.org	17860	2014.0	jeep
1997	https://dothan.craigslist.org	54488	2020.0	ford
1998	https://dothan.craigslist.org	33990	2017.0	ram
1999	https://dothan.craigslist.org	3	2020.0	ford
2000	https://dothan.craigslist.org	18681	2019.0	nissan

	model	condition	cylinders	...	size	type
\						
1996	grand cherokee limited	NaN	NaN	...	NaN	NaN
1997	f-150 lariat 4wd	NaN	NaN	...	NaN	NaN
1998	1500 crew cab tradesman	good	8 cylinders	...	NaN	pickup
1999	fusion se sedan	NaN	NaN	...	NaN	NaN
2000	altima 2.5 sr sedan	NaN	NaN	...	NaN	NaN

	paint_color	image_url \
1996	NaN	https://images.craigslist.org/00000_ijP2Qx9vMi...
1997	NaN	https://images.craigslist.org/00U0U_dT0exE0B2l...
1998	blue	https://images.craigslist.org/00Y0Y_jRbwm0dSjS...
1999	NaN	https://images.craigslist.org/00E0E_b3RHuW4jYv...
2000	NaN	https://images.craigslist.org/00101_lBMiBbuKBr...

	description	county
state \		
1996	2014 JEEP GRAND CHEROKEE LIMITED ~ Hundreds of...	NaN al
1997	2020 FORD F-150 LARIAT 4WD / F150 4X4 TRUCK ~ ...	NaN al
1998	Carvana is the safer way to buy a car During t...	NaN al
1999	2020 FORD FUSION SE SEDAN ~ Hundreds of NEW & ...	NaN al

```
2000 2019 NISSAN ALTIMA 2.5 SR SEDAN ~ Hundreds of ... NaN al
```

```
      lat      long      posting_date
1996 29.801374 -82.531052 2021-04-18T17:15:59-0500
1997 29.802119 -82.529850 2021-04-18T17:14:22-0500
1998 31.230000 -85.400000 2021-04-18T12:50:51-0500
1999 29.803337 -82.528074 2021-04-18T11:59:35-0500
2000 29.802566 -82.529678 2021-04-18T11:59:27-0500
```

```
[5 rows x 26 columns]
```

```
df.info
```

```
<bound method DataFrame.info of          id
url \
0      7222695916 https://prescott.craigslist.org/cto/d/prescott...
1      7218891961 https://fayar.craigslist.org/ctd/d/bentonville...
2      7221797935 https://keys.craigslist.org/cto/d/summerland-k...
3      7222270760 https://worcester.craigslist.org/cto/d/west-br...
4      7210384030 https://greensboro.craigslist.org/cto/d/trinit...
...
1996 7308972392 https://dothan.craigslist.org/ctd/d/alachua-20...
1997 7308971633 https://dothan.craigslist.org/ctd/d/alachua-20...
1998 7308831024 https://dothan.craigslist.org/ctd/d/dothan-201...
1999 7308801755 https://dothan.craigslist.org/ctd/d/alachua-20...
2000 7308801682 https://dothan.craigslist.org/ctd/d/alachua-20...
```

```
      region      region_url  price
\
0      prescott  https://prescott.craigslist.org  6000
1      fayetteville  https://fayar.craigslist.org  11900
2      florida keys  https://keys.craigslist.org  21000
3  worcester / central MA  https://worcester.craigslist.org  1500
4      greensboro  https://greensboro.craigslist.org  4900
...
1996      dothan  https://dothan.craigslist.org  17860
1997      dothan  https://dothan.craigslist.org  54488
1998      dothan  https://dothan.craigslist.org  33990
1999      dothan  https://dothan.craigslist.org    3
```

2000 dothan https://dothan.craigslist.org 18681

	year	manufacturer	model	condition
cylinders \				
0	NaN	NaN	NaN	NaN
NaN				
1	NaN	NaN	NaN	NaN
NaN				
2	NaN	NaN	NaN	NaN
NaN				
3	NaN	NaN	NaN	NaN
NaN				
4	NaN	NaN	NaN	NaN
NaN				
...
...				
1996	2014.0	jeep	grand cherokee limited	NaN
NaN				
1997	2020.0	ford	f-150 lariat 4wd	NaN
NaN				
1998	2017.0	ram	1500 crew cab tradesman	good 8
cylinders				
1999	2020.0	ford	fusion se sedan	NaN
NaN				
2000	2019.0	nissan	altima 2.5 sr sedan	NaN
NaN				

	size	type	paint_color \
0	NaN	NaN	NaN
1	NaN	NaN	NaN
2	NaN	NaN	NaN
3	NaN	NaN	NaN
4	NaN	NaN	NaN
...
1996	NaN	NaN	NaN
1997	NaN	NaN	NaN
1998	NaN	pickup	blue
1999	NaN	NaN	NaN
2000	NaN	NaN	NaN

	image_url \
0	NaN
1	NaN
2	NaN
3	NaN
4	NaN
...	...
1996	https://images.craigslist.org/00000_ijP2Qx9vMi...
1997	https://images.craigslist.org/00U0U_dT0exE0B2l...

```

1998 https://images.craigslist.org/00Y0Y_jRbwm0dSjS...
1999 https://images.craigslist.org/00E0E_b3RHuW4jYv...
2000 https://images.craigslist.org/00101_lBMiBbuKBr...

```

```

                                description county
state \
0                                NaN      NaN      az
1                                NaN      NaN      ar
2                                NaN      NaN      fl
3                                NaN      NaN      ma
4                                NaN      NaN      nc
...                               ...      ...      ...
1996  2014 JEEP GRAND CHEROKEE LIMITED ~ Hundreds of...      NaN      al
1997  2020 FORD F-150 LARIAT 4WD / F150 4X4 TRUCK ~ ...      NaN      al
1998  Carvana is the safer way to buy a car During t...      NaN      al
1999  2020 FORD FUSION SE SEDAN ~ Hundreds of NEW & ...      NaN      al
2000  2019 NISSAN ALTIMA 2.5 SR SEDAN ~ Hundreds of ...      NaN      al

```

```

                                lat      long      posting_date
0                                NaN      NaN      NaN
1                                NaN      NaN      NaN
2                                NaN      NaN      NaN
3                                NaN      NaN      NaN
4                                NaN      NaN      NaN
...                               ...      ...      ...
1996  29.801374 -82.531052  2021-04-18T17:15:59-0500
1997  29.802119 -82.529850  2021-04-18T17:14:22-0500
1998  31.230000 -85.400000  2021-04-18T12:50:51-0500
1999  29.803337 -82.528074  2021-04-18T11:59:35-0500
2000  29.802566 -82.529678  2021-04-18T11:59:27-0500

```

```
[2001 rows x 26 columns]>
```

```
df.describe
```

```

<bound method NDFrame.describe of                                id
url \
0      7222695916 https://prescott.craigslist.org/cto/d/prescott...
1      7218891961 https://fayar.craigslist.org/ctd/d/bentonville...
2      7221797935 https://keys.craigslist.org/cto/d/summerland-k...

```

3	7222270760	https://worcester.craigslist.org/cto/d/west-br...
4	7210384030	https://greensboro.craigslist.org/cto/d/trinit...
...
1996	7308972392	https://dothan.craigslist.org/ctd/d/alachua-20...
1997	7308971633	https://dothan.craigslist.org/ctd/d/alachua-20...
1998	7308831024	https://dothan.craigslist.org/ctd/d/dothan-201...
1999	7308801755	https://dothan.craigslist.org/ctd/d/alachua-20...
2000	7308801682	https://dothan.craigslist.org/ctd/d/alachua-20...

	region	region_url	price
\			
0	prescott	https://prescott.craigslist.org	6000
1	fayetteville	https://fayar.craigslist.org	11900
2	florida keys	https://keys.craigslist.org	21000
3	worcester / central MA	https://worcester.craigslist.org	1500
4	greensboro	https://greensboro.craigslist.org	4900

...
1996	dothan	https://dothan.craigslist.org	17860
1997	dothan	https://dothan.craigslist.org	54488
1998	dothan	https://dothan.craigslist.org	33990
1999	dothan	https://dothan.craigslist.org	3
2000	dothan	https://dothan.craigslist.org	18681

	year	manufacturer	model	condition
cylinders \				
0	NaN	NaN	NaN	NaN
NaN				
1	NaN	NaN	NaN	NaN
NaN				
2	NaN	NaN	NaN	NaN
NaN				
3	NaN	NaN	NaN	NaN
NaN				
4	NaN	NaN	NaN	NaN
NaN				
...
...				
1996	2014.0	jeep	grand cherokee limited	NaN
NaN				

1997	2020.0	ford	f-150 lariat 4wd	NaN
NaN				
1998	2017.0	ram	1500 crew cab tradesman	good 8 cylinders
1999	2020.0	ford	fusion se sedan	NaN
NaN				
2000	2019.0	nissan	altima 2.5 sr sedan	NaN
NaN				

	...	size	type	paint_color	\
0	...	NaN	NaN	NaN	
1	...	NaN	NaN	NaN	
2	...	NaN	NaN	NaN	
3	...	NaN	NaN	NaN	
4	...	NaN	NaN	NaN	
...	
1996	...	NaN	NaN	NaN	
1997	...	NaN	NaN	NaN	
1998	...	NaN	pickup	blue	
1999	...	NaN	NaN	NaN	
2000	...	NaN	NaN	NaN	

		image_url	\
0		NaN	
1		NaN	
2		NaN	
3		NaN	
4		NaN	
...		...	
1996	https://images.craigslist.org/00000_ijP2Qx9vMi...		
1997	https://images.craigslist.org/00U0U_dT0exE0B2l...		
1998	https://images.craigslist.org/00Y0Y_jRbwm0dSjS...		
1999	https://images.craigslist.org/00E0E_b3RHuW4jYv...		
2000	https://images.craigslist.org/00101_lBMiBbuKBr...		

			description	county
state	\			
0		NaN	NaN	az
1		NaN	NaN	ar
2		NaN	NaN	fl
3		NaN	NaN	ma
4		NaN	NaN	nc
...	
1996	2014	JEEP GRAND CHEROKEE LIMITED ~ Hundreds of...	NaN	al

1997	2020	FORD F-150 LARIAT 4WD / F150 4X4 TRUCK ~ ...	NaN	al
1998		Carvana is the safer way to buy a car During t...	NaN	al
1999	2020	FORD FUSION SE SEDAN ~ Hundreds of NEW & ...	NaN	al
2000	2019	NISSAN ALTIMA 2.5 SR SEDAN ~ Hundreds of ...	NaN	al

	lat	long	posting_date
0	NaN	NaN	NaN
1	NaN	NaN	NaN
2	NaN	NaN	NaN
3	NaN	NaN	NaN
4	NaN	NaN	NaN
...
1996	29.801374	-82.531052	2021-04-18T17:15:59-0500
1997	29.802119	-82.529850	2021-04-18T17:14:22-0500
1998	31.230000	-85.400000	2021-04-18T12:50:51-0500
1999	29.803337	-82.528074	2021-04-18T11:59:35-0500
2000	29.802566	-82.529678	2021-04-18T11:59:27-0500

[2001 rows x 26 columns]>

df.isnull

```
<bound method DataFrame.isnull of          id
url \
0      7222695916  https://prescott.craigslist.org/cto/d/prescott...
1      7218891961  https://fayar.craigslist.org/ctd/d/bentonville...
2      7221797935  https://keys.craigslist.org/cto/d/summerland-k...
3      7222270760  https://worcester.craigslist.org/cto/d/west-br...
4      7210384030  https://greensboro.craigslist.org/cto/d/trinit...
...
1996   7308972392  https://dothan.craigslist.org/ctd/d/alachua-20...
1997   7308971633  https://dothan.craigslist.org/ctd/d/alachua-20...
1998   7308831024  https://dothan.craigslist.org/ctd/d/dothan-201...
1999   7308801755  https://dothan.craigslist.org/ctd/d/alachua-20...
2000   7308801682  https://dothan.craigslist.org/ctd/d/alachua-20...
```

\	region	region_url	price
0	prescott	https://prescott.craigslist.org	6000
1	fayetteville	https://fayar.craigslist.org	11900
2	florida keys	https://keys.craigslist.org	21000
3	worcester / central MA	https://worcester.craigslist.org	1500

4		greensboro	https://greensboro.craigslist.org	4900
...	
1996		dothan	https://dothan.craigslist.org	17860
1997		dothan	https://dothan.craigslist.org	54488
1998		dothan	https://dothan.craigslist.org	33990
1999		dothan	https://dothan.craigslist.org	3
2000		dothan	https://dothan.craigslist.org	18681
	year	manufacturer	model	condition
cylinders \				
0	NaN	NaN	NaN	NaN
NaN				
1	NaN	NaN	NaN	NaN
NaN				
2	NaN	NaN	NaN	NaN
NaN				
3	NaN	NaN	NaN	NaN
NaN				
4	NaN	NaN	NaN	NaN
NaN				
...
...				
1996	2014.0	jeep	grand cherokee limited	NaN
NaN				
1997	2020.0	ford	f-150 lariat 4wd	NaN
NaN				
1998	2017.0	ram	1500 crew cab tradesman	good 8
cylinders				
1999	2020.0	ford	fusion se sedan	NaN
NaN				
2000	2019.0	nissan	altima 2.5 sr sedan	NaN
NaN				
	...	size	type	paint_color \
0	...	NaN	NaN	NaN
1	...	NaN	NaN	NaN
2	...	NaN	NaN	NaN
3	...	NaN	NaN	NaN
4	...	NaN	NaN	NaN
...
1996	...	NaN	NaN	NaN
1997	...	NaN	NaN	NaN
1998	...	NaN	pickup	blue

1999	...	NaN	NaN	NaN
2000	...	NaN	NaN	NaN

	image_url \
0	NaN
1	NaN
2	NaN
3	NaN
4	NaN

...	...
1996	https://images.craigslist.org/00000_ijP2Qx9vMi...
1997	https://images.craigslist.org/00U0U_dT0exE0B2l...
1998	https://images.craigslist.org/00Y0Y_jRbwm0dSjS...
1999	https://images.craigslist.org/00E0E_b3RHuW4jYv...
2000	https://images.craigslist.org/00101_lBMiBbuKBr...

state \	description	county
0	NaN	NaN az
1	NaN	NaN ar
2	NaN	NaN fl
3	NaN	NaN ma
4	NaN	NaN nc
...

1996	2014 JEEP GRAND CHEROKEE LIMITED ~ Hundreds of...	NaN al
1997	2020 FORD F-150 LARIAT 4WD / F150 4X4 TRUCK ~ ...	NaN al
1998	Carvana is the safer way to buy a car During t...	NaN al
1999	2020 FORD FUSION SE SEDAN ~ Hundreds of NEW & ...	NaN al
2000	2019 NISSAN ALTIMA 2.5 SR SEDAN ~ Hundreds of ...	NaN al

	lat	long	posting_date
0	NaN	NaN	NaN
1	NaN	NaN	NaN
2	NaN	NaN	NaN
3	NaN	NaN	NaN
4	NaN	NaN	NaN

...
1996	29.801374	-82.531052	2021-04-18T17:15:59-0500
1997	29.802119	-82.529850	2021-04-18T17:14:22-0500
1998	31.230000	-85.400000	2021-04-18T12:50:51-0500

```
1999 29.803337 -82.528074 2021-04-18T11:59:35-0500
2000 29.802566 -82.529678 2021-04-18T11:59:27-0500
```

```
[2001 rows x 26 columns]>
```

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
```

```
RangeIndex: 2001 entries, 0 to 2000
```

```
Data columns (total 26 columns):
```

#	Column	Non-Null Count	Dtype
0	id	2001 non-null	int64
1	url	2001 non-null	object
2	region	2001 non-null	object
3	region_url	2001 non-null	object
4	price	2001 non-null	int64
5	year	1952 non-null	float64
6	manufacturer	1831 non-null	object
7	model	1961 non-null	object
8	condition	1122 non-null	object
9	cylinders	1258 non-null	object
10	fuel	1940 non-null	object
11	odometer	1962 non-null	float64
12	title_status	1871 non-null	object
13	transmission	1973 non-null	object
14	VIN	1268 non-null	object
15	drive	1363 non-null	object
16	size	493 non-null	object
17	type	1380 non-null	object
18	paint_color	1534 non-null	object
19	image_url	1974 non-null	object
20	description	1974 non-null	object
21	county	0 non-null	float64
22	state	2001 non-null	object
23	lat	1962 non-null	float64
24	long	1962 non-null	float64
25	posting_date	1974 non-null	object

```
dtypes: float64(5), int64(2), object(19)
```

```
memory usage: 406.6+ KB
```

```
df.describe()
```

	id	price	year	odometer	county
count	2.001000e+03	2.001000e+03	1952.000000	1.962000e+03	0.0
mean	7.308532e+09	5.625151e+05	2011.201332	2.038947e+05	NaN
std	1.150144e+07	2.219042e+07	9.704075	9.915782e+05	NaN

min	7.208550e+09	0.000000e+00	1903.000000	0.000000e+00	NaN
25%	7.305754e+09	5.500000e+03	2008.000000	2.967350e+04	NaN
50%	7.310397e+09	1.720000e+04	2013.000000	8.799700e+04	NaN
75%	7.313504e+09	2.998000e+04	2017.000000	1.572288e+05	NaN
max	7.316878e+09	9.876543e+08	2021.000000	9.999999e+06	NaN

	lat	long
count	1962.000000	1962.000000
mean	33.735365	-85.549365
std	2.167945	3.375666
min	26.021800	-122.693000
25%	32.922900	-86.817617
50%	33.455361	-86.737847
75%	33.736288	-85.480000
max	44.120200	-73.572300

df.isnull

```
<bound method DataFrame.isnull of                                     id
url \
0      7222695916  https://prescott.craigslist.org/cto/d/prescott...
1      7218891961  https://fayar.craigslist.org/ctd/d/bentonville...
2      7221797935  https://keys.craigslist.org/cto/d/summerland-k...
3      7222270760  https://worcester.craigslist.org/cto/d/west-br...
4      7210384030  https://greensboro.craigslist.org/cto/d/trinit...
...
1996   7308972392  https://dothan.craigslist.org/ctd/d/alachua-20...
1997   7308971633  https://dothan.craigslist.org/ctd/d/alachua-20...
1998   7308831024  https://dothan.craigslist.org/ctd/d/dothan-201...
1999   7308801755  https://dothan.craigslist.org/ctd/d/alachua-20...
2000   7308801682  https://dothan.craigslist.org/ctd/d/alachua-20...
```

	region	region_url	price
\			
0	prescott	https://prescott.craigslist.org	6000
1	fayetteville	https://fayar.craigslist.org	11900
2	florida keys	https://keys.craigslist.org	21000
3	worcester / central MA	https://worcester.craigslist.org	1500
4	greensboro	https://greensboro.craigslist.org	4900
...

1996	dothan	https://dothan.craigslist.org	17860
1997	dothan	https://dothan.craigslist.org	54488
1998	dothan	https://dothan.craigslist.org	33990
1999	dothan	https://dothan.craigslist.org	3
2000	dothan	https://dothan.craigslist.org	18681

	year	manufacturer	model	condition
cylinders \				
0	NaN	NaN	NaN	NaN
NaN				
1	NaN	NaN	NaN	NaN
NaN				
2	NaN	NaN	NaN	NaN
NaN				
3	NaN	NaN	NaN	NaN
NaN				
4	NaN	NaN	NaN	NaN
NaN				
...
...				
1996	2014.0	jeep	grand cherokee limited	NaN
NaN				
1997	2020.0	ford	f-150 lariat 4wd	NaN
NaN				
1998	2017.0	ram	1500 crew cab tradesman	good 8
cylinders				
1999	2020.0	ford	fusion se sedan	NaN
NaN				
2000	2019.0	nissan	altima 2.5 sr sedan	NaN
NaN				

	...	size	type	paint_color \
0	...	NaN	NaN	NaN
1	...	NaN	NaN	NaN
2	...	NaN	NaN	NaN
3	...	NaN	NaN	NaN
4	...	NaN	NaN	NaN
...
1996	...	NaN	NaN	NaN
1997	...	NaN	NaN	NaN
1998	...	NaN	pickup	blue
1999	...	NaN	NaN	NaN
2000	...	NaN	NaN	NaN

image_url \

0		NaN
1		NaN
2		NaN
3		NaN
4		NaN
...		...
1996	https://images.craigslist.org/00000_ijP2Qx9vMi...	
1997	https://images.craigslist.org/00U0U_dT0exE0B2l...	
1998	https://images.craigslist.org/00Y0Y_jRbwm0dSjS...	
1999	https://images.craigslist.org/00E0E_b3RHuW4jYv...	
2000	https://images.craigslist.org/00101_lBMiBbukBr...	

state \	description	county
0		NaN NaN az
1		NaN NaN ar
2		NaN NaN fl
3		NaN NaN ma
4		NaN NaN nc
...	
1996	2014 JEEP GRAND CHEROKEE LIMITED ~ Hundreds of...	NaN al
1997	2020 FORD F-150 LARIAT 4WD / F150 4X4 TRUCK ~ ...	NaN al
1998	Carvana is the safer way to buy a car During t...	NaN al
1999	2020 FORD FUSION SE SEDAN ~ Hundreds of NEW & ...	NaN al
2000	2019 NISSAN ALTIMA 2.5 SR SEDAN ~ Hundreds of ...	NaN al

	lat	long	posting_date
0	NaN	NaN	NaN
1	NaN	NaN	NaN
2	NaN	NaN	NaN
3	NaN	NaN	NaN
4	NaN	NaN	NaN
...
1996	29.801374	-82.531052	2021-04-18T17:15:59-0500
1997	29.802119	-82.529850	2021-04-18T17:14:22-0500
1998	31.230000	-85.400000	2021-04-18T12:50:51-0500
1999	29.803337	-82.528074	2021-04-18T11:59:35-0500
2000	29.802566	-82.529678	2021-04-18T11:59:27-0500

[2001 rows x 26 columns]>

```
df.columns
```

```
Index(['id', 'url', 'region', 'region_url', 'price', 'year',  
      'manufacturer',  
      'model', 'condition', 'cylinders', 'fuel', 'odometer',  
      'title_status',  
      'transmission', 'VIN', 'drive', 'size', 'type', 'paint_color',  
      'image_url', 'description', 'county', 'state', 'lat', 'long',  
      'posting_date'],  
      dtype='object')
```

```
data=['id','region']
```

```
data
```

```
['id', 'region']
```

```
df[data]
```

	id	region
0	7222695916	prescott
1	7218891961	fayetteville
2	7221797935	florida keys
3	7222270760	worcester / central MA
4	7210384030	greensboro
...
1996	7308972392	dothan
1997	7308971633	dothan
1998	7308831024	dothan
1999	7308801755	dothan
2000	7308801682	dothan

```
[2001 rows x 2 columns]
```

```
df.size
```

```
52026
```

```
df[data].head()
```

	id	region
0	7222695916	prescott
1	7218891961	fayetteville
2	7221797935	florida keys
3	7222270760	worcester / central MA
4	7210384030	greensboro

```
df[data].tail()
```

	id	region
1996	7308972392	dothan
1997	7308971633	dothan

1998	7308831024	dothan
1999	7308801755	dothan
2000	7308801682	dothan