Week 2 Assignment

January 18, 2021

[4]:
```
#Week 2 Assignment
#For this assignment we will imput a dataset and run commands through Geopandas␣
 ↪in order to visualize data and query it.
#We can use Geopandas as a tool to manipulate CSV files and we ran these␣
 ↪commands: .shape, .info, .head(), .plot(), and .value_counts()
#The implication are very relavant to our digial humanities course and it␣
 ↪investigates many aspects of coding.
import geopandas as gpd
data = gpd.read_file('totalmiles.csv')
type(data)
```

[4]:
```
geopandas.geodataframe.GeoDataFrame
```

[5]:
```
data.head ()
```

[5]:
```
  Date Name              Date Value Total Miles of Bicycle Lanes and Paths  \
0    FY2009  07/01/2009 12:00:00 AM                                  203.46
1    FY2010  07/01/2010 12:00:00 AM                                   205.2
2    FY2011  07/01/2011 12:00:00 AM                                  228.61
3    FY2012  07/01/2012 12:00:00 AM                                  283.15
4    FY2013  07/01/2013 12:00:00 AM                                  385.65

  geometry
0     None
1     None
2     None
3     None
4     None
```

[7]:
```
#running the shape command
data.shape
```

[7]:
```
(5, 4)
```

[8]:
```
#running the info command
data.info
```

[8]:
```
<bound method DataFrame.info of   Date Name             Date Value Total Miles
of Bicycle Lanes and Paths  \
0    FY2009  07/01/2009 12:00:00 AM                                  203.46
1    FY2010  07/01/2010 12:00:00 AM                                   205.2
2    FY2011  07/01/2011 12:00:00 AM                                  228.61
3    FY2012  07/01/2012 12:00:00 AM                                  283.15
4    FY2013  07/01/2013 12:00:00 AM                                  385.65

  geometry
0     None
1     None
2     None
3     None
4     None  >
```

[9]:
```
#running the head command
data.head ()
```

[9]:
```
  Date Name             Date Value Total Miles of Bicycle Lanes and Paths  \
0    FY2009  07/01/2009 12:00:00 AM                                  203.46
1    FY2010  07/01/2010 12:00:00 AM                                   205.2
2    FY2011  07/01/2011 12:00:00 AM                                  228.61
3    FY2012  07/01/2012 12:00:00 AM                                  283.15
4    FY2013  07/01/2013 12:00:00 AM                                  385.65

  geometry
0     None
1     None
2     None
3     None
4     None
```

[10]:
```
#running the plot command
data.plot ()
```

[10]:
```
<bound method GeoDataFrame.plot of   Date Name             Date Value Total
Miles of Bicycle Lanes and Paths  \
0    FY2009  07/01/2009 12:00:00 AM                                  203.46
1    FY2010  07/01/2010 12:00:00 AM                                   205.2
2    FY2011  07/01/2011 12:00:00 AM                                  228.61
3    FY2012  07/01/2012 12:00:00 AM                                  283.15
4    FY2013  07/01/2013 12:00:00 AM                                  385.65

  geometry
0     None
1     None
2     None
```

```
3     None
4     None  >
```

[13]:
```
#running the data value count command
data['Total Miles of Bicycle Lanes and Paths'].value_counts()
```

[13]:
```
228.61    1
205.2     1
385.65    1
283.15    1
203.46    1
Name: Total Miles of Bicycle Lanes and Paths, dtype: int64
```

[24]:
```
#query command
data_trimmed = data['geometry'].copy()
data_trimmed
```

[24]:
```
0    None
1    None
2    None
3    None
4    None
Name: geometry, dtype: geometry
```

[ ]:
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