JakeDineen_5.2

August 8, 2018

```
In [1]: import pandas as pd
        import numpy as np
        #Store data
        state_data = {'State':['Alabama','Alaska','Arizona','Arkansas'],'PostCode':['AL','AK',
        #Read as dataframe + Display
        state = pd.DataFrame(state_data, columns=['State', 'PostCode', 'Area', 'Pop'])
        state
Out[1]:
              State PostCode
                                 Area
                                             Pop
           Alabama
                               52,423
                                       4,040,587
                                         550,043
        1
            Alaska
                              656,424
                          ΑK
           Arizona
                          ΑZ
                                    * 3,665,228
        3 Arkansas
                          AR
                               53,182 2,350,750
In [2]: #Set State as index
        state = state.set_index('State')
        state
Out[2]:
                 PostCode
                              Area
                                          Pop
        State
        Alabama
                       ΑL
                            52,423
                                    4,040,587
        Alaska
                       AK
                           656,424
                                      550,043
        Arizona
                       AZ
                                    3,665,228
        Arkansas
                       AR
                            53,182 2,350,750
In [3]: #Replace the '*' with '0'.
        state.replace('*','0', inplace = True)
        state
Out[3]:
                 PostCode
                              Area
                                          Pop
        State
                                    4,040,587
        Alabama
                       ΑL
                            52,423
        Alaska
                       AK
                           656,424
                                      550,043
        Arizona
                       AZ
                                 0 3,665,228
        Arkansas
                       AR
                            53,182 2,350,750
In [6]: #Define a function to replace ',' with ''.
        def replace_commas(x):
```

```
try:
               return x.replace(',', '')
           except:
               print('Error')
        state['Area'] = state['Area'].map(replace_commas)
        state['Pop'] = state['Pop'].map(replace_commas)
        state
Out[6]:
                PostCode
                            Area
                                      Pop
       State
       Alabama
                      AL
                           52423 4040587
       Alaska
                      AK 656424 550043
       Arizona
                               0 3665228
                      ΑZ
        Arkansas
                      AR
                           53182 2350750
```