Inplace

November 19, 2016

```
In [1]: import pandas as pd
In [2]: ufo = pd.read_csv('http://bit.ly/uforeports')
In [3]: ufo.shape
Out[3]: (18241, 5)
In [4]: ufo.head(3)
Out [4]:
                  City Colors Reported Shape Reported State
                                                                          Time
                Ithaca
                                    NaN
                                              TRIANGLE
                                                          NY
                                                                6/1/1930 22:00
        1 Willingboro
                                                 OTHER
                                                               6/30/1930 20:00
                                    NaN
                                                          NJ
        2
               Holyoke
                                                  OVAL
                                                           CO
                                                               2/15/1931 14:00
                                    NaN
In [5]: ufo.drop('City', axis=1).head()
        # drop method has inplace param False by default
Out [5]:
          Colors Reported Shape Reported State
                                                             Time
                                 TRIANGLE
                                             NY
                                                  6/1/1930 22:00
                      NaN
        1
                                    OTHER
                                             NJ 6/30/1930 20:00
                      NaN
        2
                      NaN
                                     OVAL
                                             CO 2/15/1931 14:00
        3
                      NaN
                                     DISK
                                             KS
                                                  6/1/1931 13:00
        4
                                             NY 4/18/1933 19:00
                      NaN
                                    LIGHT
In [6]: ufo.head() # city column is still there
Out [6]:
                           City Colors Reported Shape Reported State
                                                       TRIANGLE
        0
                         Ithaca
                                             NaN
                                                                    NY
                                                                         6/1/1930 22:
        1
                    Willingboro
                                             NaN
                                                           OTHER
                                                                    NJ 6/30/1930 20:
        2
                        Holyoke
                                                            OVAL
                                                                    CO 2/15/1931 14:
                                             NaN
        3
                        Abilene
                                                            DISK
                                                                    KS
                                                                         6/1/1931 13:
                                             NaN
          New York Worlds Fair
                                                                    NY 4/18/1933 19:
                                             NaN
                                                          LIGHT
In [7]: ufo.drop('City', axis=1, inplace=True) # inplace = True affects underlying
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T:

In [8]: ufo.head() # city disappeared

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Out[8]: Colors Reported Shape Reported State
                                                             Time
                                TRIANGLE
        0
                      NaN
                                             NY
                                                  6/1/1930 22:00
        1
                      NaN
                                    OTHER
                                             NJ 6/30/1930 20:00
        2
                      NaN
                                     OVAL
                                             CO 2/15/1931 14:00
        3
                                             KS 6/1/1931 13:00
                      NaN
                                     DISK
                                             NY 4/18/1933 19:00
                      NaN
                                    LIGHT
In [11]: ufo.dropna(how='any').shape # will drop row if any values are NaN => shape
         # inplace is false by default
Out[11]: (2490, 4)
In [12]: ufo.shape # check shape again => still there
Out[12]: (18241, 4)
In [19]: ufo.tail()
Out [19]:
                          Colors Reported Shape Reported State
         Time
         12/31/2000 23:00
                                       NaN
                                                 TRIANGLE
                                                              IL
         12/31/2000 23:00
                                       NaN
                                                     DISK
                                                              ΤA
         12/31/2000 23:45
                                       NaN
                                                      NaN
                                                             WΙ
         12/31/2000 23:45
                                       RED
                                                    LIGHT
                                                             WΙ
         12/31/2000 23:59
                                       NaN
                                                     OVAL
                                                             FL
In [20]: ufo.fillna(method='bfill').tail()
Out [20]:
                          Colors Reported Shape Reported State
         Time
         12/31/2000 23:00
                                       RED
                                                 TRIANGLE
                                                              IL
         12/31/2000 23:00
                                       RED
                                                     DISK
                                                              ΙA
         12/31/2000 23:45
                                       RED
                                                    LIGHT
                                                             WΙ
         12/31/2000 23:45
                                                    LIGHT
                                       RED
                                                             WΙ
         12/31/2000 23:59
                                       NaN
                                                     OVAL
                                                             FL
In [21]: ufo.fillna(method='ffill').tail()
Out [21]:
                          Colors Reported Shape Reported State
         Time
                                                 TRIANGLE
         12/31/2000 23:00
                                       RED
                                                              IL
         12/31/2000 23:00
                                                     DISK
                                       RED
                                                              ΤA
         12/31/2000 23:45
                                       RED
                                                     DISK
                                                             WΙ
         12/31/2000 23:45
                                      RED
                                                             WΙ
                                                    LIGHT
         12/31/2000 23:59
                                       RED
                                                     OVAL
                                                             FL
In [ ]:
```