

# 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
0	Ithaca	NaN	TRIANGLE	NY	6/1/1930 22:00
1	Willingboro	NaN	OTHER	NJ	6/30/1930 20:00
2	Holyoke	NaN	OVAL	CO	2/15/1931 14:00

```
In [5]: ufo.drop('City', axis=1).head()  
# drop method has inplace param False by default
```

```
Out[5]:
```

	Colors Reported	Shape Reported	State	Time
0	NaN	TRIANGLE	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	NaN	DISK	KS	6/1/1931 13:00
4	NaN	LIGHT	NY	4/18/1933 19:00

```
In [6]: ufo.head() # city column is still there
```

```
Out[6]:
```

	City	Colors Reported	Shape Reported	State	Time
0	Ithaca	NaN	TRIANGLE	NY	6/1/1930 22:00
1	Willingboro	NaN	OTHER	NJ	6/30/1930 20:00
2	Holyoke	NaN	OVAL	CO	2/15/1931 14:00
3	Abilene	NaN	DISK	KS	6/1/1931 13:00
4	New York Worlds Fair	NaN	LIGHT	NY	4/18/1933 19:00

```
In [7]: ufo.drop('City', axis=1, inplace=True) # inplace = True affects underlying
```

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

```
Out[8]:
```

	Colors	Reported	Shape	Reported	State	Time
0		NaN	TRIANGLE	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		NaN	DISK	KS	6/1/1931	13:00
4		NaN	LIGHT	NY	4/18/1933	19:00

```
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	IA	
12/31/2000 23:45		NaN	NaN	WI	
12/31/2000 23:45		RED	LIGHT	WI	
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	IA	
12/31/2000 23:45		RED	LIGHT	WI	
12/31/2000 23:45		RED	LIGHT	WI	
12/31/2000 23:59		NaN	OVAL	FL	

```
In [21]: ufo.fillna(method='ffill').tail()
```

```
Out[21]:
```

	Colors	Reported	Shape	Reported	State
Time					
12/31/2000 23:00		RED	TRIANGLE	IL	
12/31/2000 23:00		RED	DISK	IA	
12/31/2000 23:45		RED	DISK	WI	
12/31/2000 23:45		RED	LIGHT	WI	
12/31/2000 23:59		RED	OVAL	FL	

```
In [ ]:
```