

Ques 11 : How to use String methods in pandas?

```
In [1]: 'hi'.upper()
```

```
Out[1]: 'HI'
```

```
In [2]: import pandas as pd
orders_ds = pd.read_table('http://bit.ly/chiporders')
orders_ds.head()
```

```
Out[2]:
```

	order_id	quantity	item_name	choice_description	item_price
0	1	1	Chips and Fresh Tomato Salsa	NaN	\$2.39
1	1	1	Izze	[Clementine]	\$3.39
2	1	1	Nantucket Nectar	[Apple]	\$3.39
3	1	1	Chips and Tomatillo-Green Chili Salsa	NaN	\$2.39
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	\$16.98

```
In [3]: orders_ds.item_name.str.upper().head(3)
```

```
Out[3]: 0    CHIPS AND FRESH TOMATO SALSA
1              IZZE
2    NANTUCKET NECTAR
Name: item_name, dtype: object
```

```
In [4]: orders_ds.item_name.str.contains('Chicken').head()
```

```
Out[4]: 0    False
1    False
2    False
3    False
4     True
Name: item_name, dtype: bool
```

```
In [5]: # Showing only the item related to 'chicken'
orders_ds[orders_ds.item_name.str.contains('Chicken')].head()
```

```
Out[5]:
```

	order_id	quantity	item_name	choice_description	item_price
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	\$16.98
5	3	1	Chicken Bowl	[Fresh Tomato Salsa (Mild), [Rice, Cheese, Sou...	\$10.98
11	6	1	Chicken Crispy Tacos	[Roasted Chili Corn Salsa, [Fajita Vegetables,...	\$8.75
12	6	1	Chicken Soft Tacos	[Roasted Chili Corn Salsa, [Rice, Black Beans,...	\$8.75
13	7	1	Chicken Bowl	[Fresh Tomato Salsa, [Fajita Vegetables, Rice,...	\$11.25

[python API for string]

<http://pandas.pydata.org/pandas-docs/stable/api.html#string-handling>

```
In [6]: orders_ds.head()
```

```
Out[6]:
```

	order_id	quantity	item_name	choice_description	item_price
0	1	1	Chips and Fresh Tomato Salsa	NaN	\$2.39
1	1	1	Izze	[Clementine]	\$3.39
2	1	1	Nantucket Nectar	[Apple]	\$3.39
3	1	1	Chips and Tomatillo-Green Chili Salsa	NaN	\$2.39
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	\$16.98

Removing Brackets from 'choice_description' column

```
In [7]: orders_ds.choice_description.str.replace('[', '').str.replace(']', '').head()
```

```
Out[7]: 0          NaN
1      Clementine
2          Apple
3          NaN
4  Tomatillo-Red Chili Salsa (Hot), Black Beans, ...
Name: choice_description, dtype: object
```

```
In [8]: orders_ds.head()
```

```
Out[8]:
```

	order_id	quantity	item_name	choice_description	item_price
0	1	1	Chips and Fresh Tomato Salsa	NaN	\$2.39
1	1	1	Izze	[Clementine]	\$3.39
2	1	1	Nantucket Nectar	[Apple]	\$3.39
3	1	1	Chips and Tomatillo-Green Chili Salsa	NaN	\$2.39
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	\$16.98

Using Regular expression ¶

```
In [9]: orders_ds.choice_description.str.replace('[\[\]]', '').head()
```

```
Out[9]: 0          NaN
1      Clementine
2          Apple
3          NaN
4  Tomatillo-Red Chili Salsa (Hot), Black Beans, ...
Name: choice_description, dtype: object
```

```
In [10]: orders_ds.head()
```

```
Out[10]:
```

	order_id	quantity	item_name	choice_description	item_price
0	1	1	Chips and Fresh Tomato Salsa	NaN	\$2.39
1	1	1	Izze	[Clementine]	\$3.39
2	1	1	Nantucket Nectar	[Apple]	\$3.39
3	1	1	Chips and Tomatillo-Green Chili Salsa	NaN	\$2.39
4	2	2	Chicken Bowl	[Tomatillo-Red Chili Salsa (Hot), [Black Beans...	\$16.98