## Pandas Slice01

## November 21, 2016

```
In [2]: import pandas as pd
        s = pd.Series([1, 2, 3])
        s.loc['Animal'] = 'Bears'
Out [2]: 0
                      1
                      2
        1
        Animal
                  Bears
        dtype: object
In [3]: original_sports = pd.Series({
                'Archery' : 'Bhutan',
                'Golf' : 'Scotland',
                'Sumo' : 'Japan',
                'Taekwondo' : 'South Korea'
            })
        cricket_loving_countries = pd.Series(['Australia', 'Barbados', 'Pakistan',
                                             index = ['Cricket', 'Cricket', 'Cricket']
        all_countries = original_sports.append(cricket_loving_countries)
In [4]: original_sports
Out[4]: Archery
                          Bhutan
        Golf
                        Scotland
        Sumo
                           Japan
                     South Korea
        Taekwondo
        dtype: object
In [5]: cricket_loving_countries
Out[5]: Cricket
                   Australia
        Cricket
                    Barbados
        Cricket
                   Pakistan
        Cricket
                     England
        dtype: object
In [6]: import pandas as pd
        purchase_1 = pd.Series({'Name' : 'Chris',
```

```
'Item Purchased' : 'Dog Food',
                               'Cost' : 22.50})
       purchase_2 = pd.Series({'Name' : 'Kevyn',
                               'Item Purchased' : 'Kitty Litter',
                               'Cost' : 2.50})
       purchase_3 = pd.Series({'Name' : 'Vinod',
                               'Item Purchased' : 'Bird Seed',
                               'Cost' : 5.00})
       df = pd.DataFrame([purchase_1, purchase_2, purchase_3], index = ['Store 1',
       df.head()
Out [6]:
                Cost Item Purchased
        Store 1 22.5
                          Dog Food Chris
        Store 1 2.5 Kitty Litter Kevyn
                          Bird Seed Vinod
        Store 2 5.0
In [7]: df.loc['Store 2']
Out[7]: Cost
       Item Purchased
                        Bird Seed
       Name
                             Vinod
       Name: Store 2, dtype: object
In [8]: type(df.loc['Store 2'])
Out [8]: pandas.core.series.Series
In [9]: df.loc['Store 1']
                Cost Item Purchased
Out[9]:
                                     Name
        Store 1 22.5
                           Dog Food Chris
        Store 1 2.5 Kitty Litter Kevyn
In [24]: # for the purchase records from the pet store,
         # how would you get a list of all items which had been
         # purchased regardless of where they might have been
         # purchased, or by whom?
         # my answer
        df.iloc[:, 1]
Out [24]: Store 1
                      Dog Food
        Store 1
                   Kitty Litter
         Store 2
                      Bird Seed
        Name: Item Purchased, dtype: object
In [23]: # tut answer
        df = pd.DataFrame([purchase_1, purchase_2, purchase_3],
                           index=['Store 1', 'Store 1', 'Store 2'])
        df['Item Purchased']
```

```
Out[23]: Store 1 Dog Food
Store 1 Kitty Litter
Store 2 Bird Seed
Name: Item Purchased, dtype: object
In []:
```