In [1]:
```
#Now we'll learn about Selecting Entries
import numpy as np
from pandas import Series,DataFrame
import pandas as pd
```

In [9]:
```
#Lets try some Series indexing
ser1 = Series(np.arange(3),index=['A','B','C'])

#multiply all values by 2, to avoid confusion in future
ser1 = 2*ser1

#Show
ser1
```

Out[9]:
```
A    0
B    2
C    4
dtype: int32
```

In [11]:
```
#Can grab entry by index name
ser1['B']
```

Out[11]:
```
2
```

In [13]:
```
#Or grab by index
ser1[1]
```

Out[13]:
```
2
```

In [15]:
```
#Can also grab by index range
ser1[0:3]
```

Out[15]:
```
A    0
B    2
C    4
dtype: int32
```

In [16]:
```
#Or grab range by range of index values
ser1[['A','B','C']]
```

Out[16]:
```
A    0
B    2
C    4
dtype: int32
```

In [17]:
```
#Or grab by logic
ser1[ser1>3]
```

Out[17]:
```
C    4
dtype: int32
```

In [19]:
```
#Can also ser using these methods
ser1[ser1>3] = 10

#Show
ser1
```

Out[19]:
```
A     0
B     2
C    10
dtype: int32
```

In [20]:
```
#Now let's see sleection in a DataFrame

dframe = DataFrame(np.arange(25).reshape((5,5)),index=['NYC','LA','SF','DC','Chi'

#Show
dframe
```

Out[20]:

	A	B	C	D	E
NYC	0	1	2	3	4
LA	5	6	7	8	9
SF	10	11	12	13	14
DC	15	16	17	18	19
Chi	20	21	22	23	24

In [21]:
```
#Select by column name
dframe['B']
```

Out[21]:
```
NYC     1
LA      6
SF     11
DC     16
Chi    21
Name: B, dtype: int32
```

In [23]:
```
#Select by multiple columns
dframe[['B','E']]
```

Out[23]:

	B	E
NYC	1	4
LA	6	9
SF	11	14
DC	16	19
Chi	21	24

In [24]:
```
#Can also use boolean
dframe[dframe['C']>8]
```

Out[24]:

	A	B	C	D	E
SF	10	11	12	13	14
DC	15	16	17	18	19
Chi	20	21	22	23	24

In [25]:
```
#Can also just shoe a boolean DataFrame
dframe> 10
```

Out[25]:

	A	B	C	D	E
NYC	False	False	False	False	False
LA	False	False	False	False	False
SF	False	True	True	True	True
DC	True	True	True	True	True
Chi	True	True	True	True	True

In [26]:
```
#Can alos use ix as previously discussed to label-index
dframe.ix['LA']
```

Out[26]:
```
A    5
B    6
C    7
D    8
E    9
Name: LA, dtype: int32
```

In [28]:
```
#Another example
dframe.ix[1]
```

Out[28]:
```
A    5
B    6
C    7
D    8
E    9
Name: LA, dtype: int32
```

In [ ]:
```
#Next we'll learn about data alignment!
```