Business Analytics Programming - Spring 2019, Practice Set # 3 (Pandas DataFrames)

```
import numpy as np
import pandas as pd
```

1. What is s[1]? = 0.5

```
s=pd.Series([.25,.5,.75,.1])
```

2. What is mapping['b']? = 0.5

```
s2=pd.Series([.25,.5,.75,.1],index=['a','b','c','d'])
mapping = s2.to_dict()
```

error

3. What is sum(s2['b':'c'])? s2[2:3] = 2+3 = 5

```
s2=pd.Series([1,2,3,4],index=['a','b','c','d'])
```

a b c d *When index value is letters instead of numbers, it will take 'c'.

4. What is sum(s2[0:2])? = 1+2 = 3

```
s2=pd.Series([1,2,3,4],index=['a','b','c','d'])
```

0 1 2 3

5. What is sum(s2[[0,2]])? 1+3 = 4

```
s2=pd.Series([1,2,3,4],index=['a','b','c','d'])
```

0 1 2 3

6. What is sum(s2[['b','d']])? 2+4 = 6 #Double slicing is comma and

```
s2=pd.Series([1,2,3,4],index=['a','b','c','d'])
```

7. What is sum(s3['b':'c'])? = 5

```
s3=pd.Series([1,2,3,4],index=['a','b','b','d'])
```

b c

taking two "b"

":" is very forgiving

"," if there is a comma, it's an error.

8. What is sum(s3[0:2])? = 3

```
s3=pd.Series([1,2,3,4],index=['a','b','b','d'])
```

0 1 2

9. What is sum(s3[[0,2]])? 4

```
s3=pd.Series([1,2,3,4],index=['a','b','b','d'])
```

0 1 2 3

10. What is sum(s3[['b','d']])? = 9

```
s3=pd.Series([1,2,3,4],index=['a','b','b','d'])
```

a b b d

11. What is sum(s4[0:2])? = 1+2 = 3

```
s4=pd.Series([1,2,3,4],index=[2,5,3,7])
```

0 1 2 3

2 5 3 7

12. **What is sum(s4[[2,5]])?**

```
s4=pd.Series([1,2,3,4],index=[2,5,3,7])
```

13. **What is sum(s4[[0,2]])?**

```
s4=pd.Series([1,2,3,4],index=[2,5,3,7])
```

14. **What is sum(fruitdf[1:3]['price'])?**

```
price=pd.Series({'cherry':2,'berry':1,'orange':3,'apple':4,'plum':7})
qty=pd.Series({'cherry':12,'berry':7,'orange':8,'apple':31})
fruitdf = pd.DataFrame({'price':price,'qty':qty})
```

15. **What is sum(fruitdf['apple':'cherry']['qty'])?**

```
price=pd.Series({'cherry':2,'berry':1,'orange':3,'apple':4,'plum':7})
qty=pd.Series({'cherry':12,'berry':7,'orange':8,'apple':31})
fruitdf = pd.DataFrame({'price':price,'qty':qty})
```

16. **What is sum(fruitdf.iloc[1:3,1])?**

```
price=pd.Series({'cherry':2,'berry':1,'orange':3,'apple':4,'plum':7})
qty=pd.Series({'cherry':12,'berry':7,'orange':8,'apple':31})
fruitdf = pd.DataFrame({'price':price,'qty':qty})
```

17. **What is fruitdf.iloc[[1,4]]['price'].sum()?**

```
price=pd.Series({'cherry':2,'berry':1,'orange':3,'apple':4,'plum':7})
qty=pd.Series({'cherry':12,'berry':7,'orange':8,'apple':31})
fruitdf = pd.DataFrame({'price':price,'qty':qty})
```

18. **What is fruitdf.loc['apple':'cherry','price'].mean()?**

```
price=pd.Series({'cherry':2,'berry':1,'orange':3,'apple':4,'plum':7})
qty=pd.Series({'cherry':12,'berry':7,'orange':8,'apple':31})
fruitdf = pd.DataFrame({'price':price,'qty':qty})
```